

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

Vol. XV.

BALTIMORE, SEPTEMBER, 1878.

No. 8.

THE PARIS EXPOSITION.

Cereal Exhibits of the World.

[FROM OUR REGULAR CORRESPONDENT.]

12 Boulevard du Temple, Paris, July 25, 1878.

On my way to the cereal exhibits of the world, I would do the agricultural restaurant injustice by passing it by without notice. It is on the borders of the Seine, delightfully cool, all refreshments cheap, and a gypsy orchestra that will give you more real pleasure, than any international concert. Close at hand is the Marine aquarium, into which fresh salt water is daily pumped from a ship: the denizens are chiefly oysters, mussels, shrimps; a few soles, some lobsters that do duty as policemen, and crabs of most bellicose habits. The tortoises sleep even when swimming.

Nearly all the countries, colonies and islands of the civilized world are represented in the Exposition by specimens of the different varieties of edible grains that are cultivated between the degrees of 38° South and 70° North latitude.

Foremost in the list of edible grains and most natural to human sustenance, is wheat. Its history runs parallel with that of mankind, and its consumption in form of bread has ever increased and gone hand in hand with civilization and refinements. The cereal products of the world, although always sufficient, probably, to supply the hungry mouths of its inhabitants, seem, like its population, unequally distributed, here a surplus, there a deficiency and again a positive want of bread. In many of the densely populated parts of Europe the product is barely sufficient to supply the consumption; in others, a large animal deficiency must be provided for. A short crop is often attended with the most serious commercial and political difficulties: hence the question of "bread" becomes vitally important. There is, however, always a compensation in the surplus of other countries, as it is rarely or never the case that universal scarcity or famine prevails in all

the food producing districts of the world at the same time.

The countries which may be considered the great producing sources of supply are the United States, Russia, Germany, Denmark, Turkey, Egypt, France, Austria, Spain, Italy and Portugal. These countries export more or less, in seasons of plentiful crops, to their neighboring nations in Europe; but some of them are frequently compelled to import largely for their own use. England, with her prolific fields and splendid system of agriculture, has a positive, permanent and increasing deficiency of supply.

In the department of cereals the United States should have equalled if not excelled all other nations; but it is to be regretted that there are but comparatively few exhibits, which, however, in quality demonstrate the superiority of the American grains.

Canada surpasses her American neighbor in the tasteful arrangement of her cereals. The specimens embrace many excellent varieties of red and white winter wheat, and some very fine samples of spring wheat; also some very good specimens of oats, rye, and barley, all giving evidence of an excellent system of cultivation. Russia—through her minister of agriculture—contributes more than five hundred specimens of cereals from her extensive grain producing districts, ranging from St. Petersburg to Siberia on the north, thence southward through the fertile valleys of the Don, the Dnieper and Dneister, to the Black Sea, and through the great valley of the Volga to the Caspian. Throughout this wide-spread region, possessing great diversity and adaptedness of soil and climate, wheat, corn, oats, rye and barley are successfully cultivated, producing a large and annually increasing surplus for export, sufficient, in the opinion of some persons, were the means of transportation adequate, to supply the deficiencies of Europe.

Egypt—the ancient granary and source of supply for the nations of Europe—contributes a well-

arranged and interesting variety of specimens. The native varieties of wheat are of the type peculiar to that country—long, rough and flinty, badly cleaned, and infested with weevil, evincing an imperfect husbandry. The best specimens in this collection come from Upper Egypt, labelled "acclimated," and grown from some of the best varieties which improved cultivation has produced in Italy, France, and England—countries which once obtained their supplies from the prolific delta of the Nile.

The specimens of corn are of the ordinary round flint variety. The samples of barley, rye and oats are of fair quality, but are badly cleaned.

In every department the products of Austria are displayed in magnificent profusion. The agricultural interests are carefully represented, and the specimens of cereals are numerous and arranged with good taste. The samples of wheat consist of red and white winter, no specimens of spring being observed in the collection. All are of excellent quality, evincing a high state of cultivation; and some of these varieties, if introduced into the U. S., would undoubtedly prove a valuable acquisition to its agricultural interests.

Prussia is unsurpassed in the neatness and finish of its agricultural departments. The numerous and admirably arranged specimens of very superior qualities of grain give evidence of the high state of cultivation which that country has obtained under the fostering care of its government, and the ability of soil and climate produce the best varieties in great proportion. The specimens of winter-wheat—white, red and amber—are of excellent character, plump, thin skinned, and good color, possessing properties necessary to yield the largest quantity of superior flour.

Norway and Sweden excite some surprise by their well arranged and excellent display of cereals grown between 58° and 70° north latitude. Even in these high latitudes the common cereals are cultivated to some small extent, but the crops are unreliable, and the product supplies only a small proportion of the requirements of the country.

Barley is successfully cultivated, even in latitude 70° the specimens are of fair quality. Rye and oats are cultivated to considerable extent between 68° and 70°. Some very good specimens of corn of the round flint variety are noticed. They were grown in latitude 59° 55'.

The agricultural department of Spain is distinguished by its elegance and the variety of its products. The specimens of wheat, with the exception of a few of superior quality, are of the usual type of Southern Europe, rough and thick skinned. The specimens of oats, barley and rye are generally good. The specimens of corn are small and flinty.

PERK.

The Abortive Ears of Corn.

We have published heretofore some of Dr. Sturtevant's views. He is a working, thinking, progressive man, and we hope will finally bring out some good results. He will certainly place the agricultural world under lasting obligations, if he succeeds in improving seed corn up to the point he indicates. His views seem at least reasonable. Allowing the pollen from poor miserable stalks that can produce only a "nubbin," to fertilize the best, must assuredly exercise a deleterious influence on the resulting grain. The case is altogether analogous to promiscuous breeding of stock—with scrub, runt males bred to thorough-bred females, no one would expect any improvement in the race.

In the matter of "root pruning," it must be carefully kept in mind, that cutting the roots is only recommended where the soil is exceedingly rich, or abundant food is furnished the corn. In a luxuriant clover field a cow may obtain a full meal within the compass of a few yards—in a poor sedge pasture she must, to do the same, roam over much ground. So with corn—in very rich soil, the short, thickly-branched roots may find all the food needed in a very small space, but on poor land they must wander far and wide. Hence, in the latter case, it is the greatest folly to cut them, especially in the latter stages of growth, when both stalk and ear rapidly develop. Something is greatly needed to prevent our Southern corn from running so much to stalk. Climate helps the Northern farmer in this respect, and gives him a small stalk. We must discover something to arrest stalk-growth with us, and we wish Dr. S. God speed in his investigations.—*Ed. Southern Cultivator.*

Dr. Sturtevant says:

"If any gentleman will take the trouble to go into the corn field when the pollen is about to fall, and will take a stalk of corn and commence at the lower joint and cut directly across, he will have, of course, a circular section, and he will find a little line each side, and in the centre a point. If he will take his knife and dissect it at that point, and take an ordinary magnifying glass, which will magnify eight or ten times, he will find that what he has cut out is a perfect ear of corn—just as perfect as a large ear will be before it is fertilized. He will see a place for every kernel on that ear just as plainly, with a magnifying glass, as he would on a large ear of corn; so much so, that he could count every kernel upon it just as he would upon a ripened ear. Now, suppose he takes the second joint from the ground and does likewise. There he will also find an ear of corn, but slightly larger than the lower one. At the third joint he will find a third ear, only slightly larger; at the fourth joint the same. At the fifth joint he will find an ear, but very much larger than the rest, and the corn from that upper joint is the corn that we ordinarily harvest as our crop. Let me remind you that I am speaking only of the Northern corn; I know very little of Western or Southern corn, but in a dozen examples of Southern white corn, I have found the same rule to apply. But in our Northern corn you will see that nature has laid the seeds for at least five ears of corn on every corn stalk in our fields. When we get above the fifth, there are usually three or four joints where there

is no embryo ear; and yet occasionally you will find where corn will be found close up to the tassel. In Southern and Western corn, we find five or six joints above the upper ear; but in ninety-nine cases out of a hundred that I have examined of Northern corn, there were three joints above the upper ear. I have in my collection one case where this upper joint had four ears of corn.

"Now we get from this statement an idea of the immense prolificacy of corn—of the possible theoretical yield; in other words, we can conceive of every stalk of corn in our fields giving us five ears. That is, there is a theoretical possibility of increasing our crops five times over the present crops. On making this discovery, the first thing which occurred to me was, how can these small ears be made to develop and grow. Well, in the beginning, as many people do, I made a mistake. I commenced by saying, that the first thing to do was to put plenty of manure on the land, and cultivate well; and I prophesied two hundred bushels to the acre. I own up that I failed; I only got one hundred bushels where I expected two. But I learned the cause of the failure, which was, that the seed was not good enough to begin with; so that I learned that the first thing of importance in growing a crop of corn is to secure proper seed. On that point I simply state that I do not know a good variety of corn for the farmer. That is a pretty strong statement; in other words, I do not know a variety of corn that meets my ideal of what corn should be. I have got it myself. I have got the best corn I can find, but I do not claim that it is what I want, by any means. It does not come up to my expectations yet, but I hope to bring it up to that point. Now, in raising corn for seed, I want to get the barren stalks out of my field, because I find upon investigation that fifty-five ears to a hundred tassels is about the average. In the best fields I have examined, there have been seventy ears to a hundred tassels. If I can get rid of the barren stalks in my field, I have increased my crop in some cases, thirty per cent., and in some cases forty-five per cent. That is a very simple thing to do, it seems to me, only give me time enough.

"But I also discovered another thing. I discovered that in almost every case the upper ear would develop and absorb the principal nutriment of the plant, and cause these smaller ears to shrivel up and become abortive. If this upper ear is broken off, then the second ear goes through the development in its place. It develops into a full and perfect ear, but it causes the lower ones to shrink and disappear. By cutting down further, you can cause these little embryo ears to develop clear to the ground.

"Now, how can those ears be made to develop in practice? I find a large percentage of facts in favor of the belief, that it can fertilize the plant so as to get a great amount of growth, and then check that plant so as to prevent that vigor from expending itself in leaf, some more of these embryo ears will develop, and I shall get a large crop; because I have produced twenty-three ears of corn from one kernel; root pruning being used, which was accomplished by thrusting a carving knife into the one side, and then on the other, which was so excessive a mutilation that the corn plant fell over; it had not

root enough to support it. By this treatment in the garden, I found the benefit of root pruning in producing these great experimental results. It is a different thing to carry it into practice in the field. In the first place all corn plants do not mature at the same time. You will find a great difference in the maturing of plants in the same row. In order to get the fullest benefit from the theory, we should apply it at the proper period of maturity of each plant in the field. We can take a row of corn, and drive down stakes so as to only go a given length, and can take a spade and drive it down each side of the row, and we can get a larger crop from that portion of the row thus treated than from the rest of the row, or from the rows each side of it. I have proved that conclusively. I have also proved that the increase in the yield has been somewhat in proportion to the efficacy of the tillage; but the experiment has presented so many difficulties in the way of obtaining accurate results, on account of variations in the field, that I do not give them any mathematical expression. In the experiments carried on at the Illinois Agricultural College on the effect of tillage, there was only a small per cent. in favor of increased tillage; but I do not remember at what time in the maturity of plant the tillages were carried out, and that is an important point.

"In order to raise a large crop of corn, we want to get, first, the proper seed; second, the proper amount of fertility; and, third, thorough cultivation, root-pruning—for that is what it is in effect, applied at the proper time, so that we shall get the largest results. If we carry our cultivation beyond the flowering of the plant, we shall, according to my experience, find an injurious result. The more I have cultivated, the more I have chopped, the more I have mutilated, up to that period, the larger has been the increase."—*Dr. Sturtevant, from Transactions Conn. Board of Agriculture, 1878.*

Chemical Corn Growing.

Considering the importance of the corn crop, the deep interest taken by Dr. Sturtevant in its growth, and the careful experiments he has made and is still making to arrive at certain satisfactory results, we do not think our readers will deem it as taking up too much room if we give more about the experiments of that philosophic farmer, and the commendable way, the brothers Sturtevant annually entertain a large number of agriculturists at their Waushakum Farm.

Dr. Sturtevant is not only a pains-taking practical man but a learned scientist. We give, from the *American Cultivator*, a well written account of the last Farmer's Field Meeting.

In response to a cordial invitation from the Sturtevant Brothers, 120 gentlemen, practically interested in the cause of agriculture, visited Waushakum Farm at South Framingham, July 18, where an exceedingly interesting and instructive Farmer's Field Meeting was held during the day.

Under the lead and direction of Dr. E. Lewis Sturtevant, the company proceeded to visit the several fields of Indian corn growing for experimental purposes, for market and for the raising of seed corn. The first field visited contained 9 1-2 acres, and upon which was growing the fourth consecutive crop of corn, no other fertilizers having been used except the Stockbridge manures. The principal aim in the cultivation of this field is to determine whether or not the corn crop may be continuously and successfully cultivated for a term of years on the same piece of ground, with no other manures except chemical fertilizers. During the past three years each acre of this field has averaged a total yield of 191 bushels of corn. This field was machine cultivated, and the cost of the labor on the crop to date is as follows ;

	Hours labor, men.	Hours labor, horses.
Plowing,	30	60
Harrowing,	15	40
Planting, May 17,	10	20
Horse hoeing and hilling, 3 hoeings, 2 hillings	80	80
Total,	135	200
Estimating 136 hours men at 15 c,		\$20.25
" 200 " horses at 7½ c,		15.00

\$35.25

Cost of labor per acre for the field of 9½ acres, \$3.69; cost of Stockbridge fertilizer, 77 bags at \$5 each, \$385; making the cost per acre about \$40.50.

The second field visited was 1 3-8 acres in extent, and cultivated as a seed area, manured heavily with barnyard manure and chemical fertilizers. In this area the effort is made to develop a variety of corn which shall possess, through heredity, the desired quality of fruitfulness that all the kernels will be able to develop and mature, under proper conditions, at least one ear to a stalk. This field was planted with one peck of seed selected from 1,000 bushels of ears. Only the twin-eared stalks were considered as suitable for furnishing seed. The eight rowed corn is selected, because it is more likely to have a small cob than the twelve-rowed, and yields a smaller stalk, finer fodder, better adapted for feeding. A fine growing stalk cut at the proper season and well cured, Dr. Sturtevant claims from his own experience in producing milk from his herd of Ayrshire cattle through the winter months, to be worth three fifths of an equal weight of hay. The ears which furnished the seed corn above mentioned, were small in diameter but large in kernel; the cob was but a trifle over twelve per cent. in amount, small in diameter and of even taper; the ear was as large near the tip as at the but; the kernels perfectly even in the row. Weight, sixty-four pounds to the struck bushel. One dollar per pint or sixty-four dollars per bushel was offered for this seed before planting.

As this field of 1 3-8 acres was entirely cultivated by hand, it is interesting to note the difference between its cost per acre and that of the 9 1-2

acre field that was cultivated entirely by machinery. The cultivation of the small field was as follows :

	Hours labor, men.	Hours labor, horses.
Plowing,	8	16
Labor on 33 large loads dung,	23	46
Harrowing,	6	12
Marking,	17½	10½
Planting,	15	
Hand hoed & re-planted May 30,	14	
Horse hoeing June 12, 14, 25, 27, and July 1, 2,	17½	17½
Total,	101	102
Cost men's labor, 101 hours at 15c,		\$15.15
" horses' " 102 " at 5½c,		7.65

\$22.80

Cost 8 cords dung at \$4.00 32.00
" 8 bags fertilizer, at \$5.00 40.00

\$72.00

Cost per acre, calling the area 1½ acres: Labor, \$15.20 per acre and fertilizer \$48.00 per acre.

The third field visited was one of ten acres, cultivated for a market crop, and without any outside expenses in experimenting. It was mostly sod land, fertilized sole with Stockbridge manures applied broadcast, cultivated entirely by machinery, at the following cost :—

	Hours labor, men.	Hours labor, horses.
Plowing,	60	120
Harrowing,	25	75
Applying fertilizer(59 bags)	15	15
Planting,	11	22
Horse hoeing, June 12, 13, July 1, 2, 5, 9, and 12,	48½	48½
Total,	159½	280½
Cost men's labor, 159½ hours at 15c,		\$23.92
" horses' " 280½ " " 7½c,		21.00

\$44.92

Cost of labor per acre to date, \$4.50; cost of fertilizer, \$295 total, or per acre, \$26.50.

In all these items of cost, they are reckoned to date, although no future expense will be incurred except that of harvesting. Dr. Sturtevant explained his experiments in root pruning, comparative merits of barnyard manure and chemical fertilizers, mutilation and many others of interest, from all of which important results may be expected in the future.

After the examination of the fields the party assembled in the Sturtevant mansion where the company organized by the choice of Hon. J. O. Adams, Secretary of the New Hampshire Board of Agriculture, as president; and fraternal and practical speeches were made by Moses Humphrey, J. B. Walker and Frank W. Miller of New Hampshire; Mr. A. W. Cheever of the *N. E. Farmer*, Prof. L. Wetherell of the *Traveler*, Mr. A. L. Murdock and other gentlemen well known among the farmers of New England. The occasion was one of great pleasure to all present,

Farm Work for September.

With September, active farm operations may be said to begin, with respect to securing some crops of the present, and sowing seeds for crops of the next year. We begin our suggestions for the farm work for the month with

RYE.

This very badly treated but valuable crop, if it has not already been sown, should be got in as soon as possible, as we think no grain receives more benefit from being sown early than rye. If it is sown early on good light soil, well prepared and fertilized with a manure that has plenty of ammonia, phosphoric acid, potash and magnesia, in it, the farmer may reasonably expect a good occasional pasture for his sheep and young stock in winter and early spring, 20 to 30 bushels of grain and 1 to 2 tons of straw worth as much as ordinary timothy hay, if it be neatly tied in bundles after being thrashed with the flail, and sent to market. The grain usually brings from 75 to 80 cents a bushel, but is worth more if kept at home, ground into meal and fed with cut provender to stock. In this way it is perhaps the richest and most economical feed that is grown on the farm for all animals, especially for fattening cattle.

WHEAT SEEDING AND CULTIVATION.

The last of this month or before the 10th of October the wheat should be sown, if a full crop be expected. There are several essential matters connected with sowing wheat, to which we wish to call attention. We are satisfied that wheat should be sown early enough to make a good root growth before winter. It should be sown on well prepared land, as near as possible two inches deep, and we prefer drilling decidedly. If the land be a light soil we should roll it after the wheat was sown. The best ground for this crop is a clover fallow. The land should be evenly plowed, and to the depth of 5 or 6 inches, at least deep enough to cover well, by a nicely turned furrow, the clover and other vegetation. This plowing should be done in time to have the vegetable matter decomposed before seeding time. Directly after plowing we should roll with a heavy roller to break any clods and compress the earth to produce rapid decomposition. After this we would advise cross plowing to intermix the humus and top and bottom soils, then harrow level, at the same time sow three hundred pounds of some good fertilizer per acre, if the wheat is to be sown broadcast—if to be drilled, the fertilizer and grass seed could be sown with the wheat. We are sure that too little attention is generally paid to the preparation of the land for the reception of the seed.

Whenever we find a great yield of wheat we find that the land was well prepared. In England where great yields per acre have been produced, the fallowing was well done notwithstanding their plows are inferior to ours, we do not plow as well as they do. All stiff soils should be comminuted, and brought into fine tilth by plowing and harrowing. Wheat delights in a clean well worked up bed and then compressed by the roller. The repeated failure in the wheat crop is no doubt owing in many cases to the slovenly way it was put in. It is worse than folly to sow wheat on poor land badly prepared and expect a good crop however favorable the season may be. This plant if well supported by proper culture and proper food in the soil, seems to have in its vigor, full power to resist attacks of fly, rust, &c. But when it is left helpless and is stunted in its food or hindered by bad culture from utilizing what there is in the soil, it becomes at once a prey to all enemies—the fly especially avoids the vigorous plants and make a lodgment among the more tender and feeble stalks. By early sowing and with early varieties, the rust may be avoided.

The idea of working two or three times in early spring, the wheat crop, is becoming very popular. There are machines for working wheat between the drills, but it has been found that the hand hoeing two or three times before the wheat begins to head is most efficacious. An excellent substitute is to use the drill for sowing, removing or stopping up each alternate tooth or pocket in the drill, and have an attachment to the drill for *hoeing*. Among many statements as to the efficacy of cultivating wheat as one would corn, to the manifest increase of product over and above expense of time and labor; we find in the Lancaster Farmer of Pennsylvania, Mr. Groff hoed a field that averaged sixty-one and fifteen sixtieths of a bushel per acre, and it is reported on good authority, a Mr. Hedgis of York Pa. hoed a field, planted with wide spaces and harvested seventy bushels per acre.

Now it appears to us that any or all of our farmers could try the coming year an experiment on even a small scale to prove this theory. They could, in the center of a piece of ground or at the sides or any part of a field, close each alternate tooth or pocket of the drill, and, next spring hoe by hand or by cultivator, drill or other implement cultivate the spaces between the rows and at harvest there would be conviction as to the result such as to warrant in the future the adoption or not of the new theory, which as yet, as far as tried by experiment, seems to be the true plan to get a large yield from less grain sown on the same quan-

tity of land. The selection of good seed is very important. Get clean heavy wheat free from disease and impurities. Fan it well and slowly, discarding the small grains. Soak it 6 hours in a strong solution of salt, copperas and sulphur, or simply in saltpetre and salt brine, stir it well and often, skim off what rises to the top, then drain the grain and roll in plaster or slaked lime and sow directly or as soon as may be convenient, certainly before it begins to sprout. During winter give it a broadcast of 4 bushels of salt and one of plaster. Give this dressing about the last of February if the weather permits.

WEEDS AND RUBBISH.

Gather together all the weeds and rubbish you can for composting or covering barn yards and hog yards. This year there will be a great growth of hog weed, as it is usually called, after the wheat crop. Mow it before it forms or ripens its seed and put it in stacks or ricks. It makes good provender for young calves and sheep or can be hauled as wanted into barn yards and under shelter to serve as bedding, and by the stock be converted into fine manure.

TURNIPS.

The white turnip may be sown before the 10th, and if the land be rich and well prepared, and the weather suits, a superior crop can be grown in all this section of country.

CORN.

Cut off and set up in neat shocks the corn as soon as the ears have become well glazed and free of milk. Tie the tops of the shocks which should not be too large. We confess we are not of that class who so loudly declaim against the practice of our forefathers in topping and blading the corn. By saving the blades properly and nicely curing the tops, both being tied in bundles and put under cover, the farmer has a lot of the choicest food for his horses and sheep and young stock. He has also a portion of his corn dry and ready for the crib very early in the fall, without the danger of heating and ready for early sale. It also gives him more time to get the rest of his corn crop in the house in good order. It is true that this method would be expensive if carried out to the extent of the whole crop, if it was a large one. But we think it pays to be pursued to a limited extent. Perhaps the grain does lose somewhat in bulk and may be in weight, but not enough to counterbalance the other advantages we have enumerated, and not to materially affect the net profits of the grain when it is low in price as now. The hay that would be saved by the blades and tops would more than compensate for the loss in grain caused

by shrinkage from the blading and topping. Besides we believe that the greater dryness of the corn, if early sales were made, would make up this loss by the extra price it would bring over corn husked fresh from the stalk-shocks. All the ways of our fathers were not bad ways—all our latter day innovations have not proved to be progressive improvements.

SHEEP AND OTHER STOCK.

Attend to these as recommended in July number of the MARYLAND FARMER, and if you can, keep rock salt always under cover for your stock to have access to it as their appetites dictate.

DITCHING AND DRAINING.

This work may be done now to advantage.

CATTLE YARDS AND PIG PENS.

Keep these well covered with weeds, turf, and coarse material to be worked up into manure, and at the same time keep the stock dry by absorbing all the liquids.

SETTING OUT ORCHARDS.

Prepare the land by deep plowing and also subsoiling where it is practicable, and have it in readiness for planting the trees in October. Provide a large compost heap that it may be all ready to use in planting the trees. It will pay vastly in the growth of the young trees.

Garden Work for September.

There is no very special work to be done in the garden this month so far as the products for this year are concerned; but if one wants a good supply of early winter and spring vegetables, some work must be done now to secure these objects.

Sowing Cabbage Seeds.—Make a rich bed well prepared—it cannot be too rich—and sow Early York and Jersey Wakefield cabbage seed, that you may have plants to set out in October for winter growing, and late spring and early summer use.

Spinach and Radish.—On just such beds as early as possible, sow spinach in drills 1 inch deep and 14 inches apart, and between these, sow Chinese Rose or White Radish seed in drills, so that the drills will be 7 inches apart, alternating spinach and radish. Rake lightly and roll or pat the earth with hoe or spade. When the radishes are removed, the spinach if too thick can be thinned and the ground well worked between the drills, which will then be 14 inches apart, and then cover over with a mulch of coarse stable manure or leave as a winter protection for the spinach. Have a large bed of this fine vegetable.

Lettuce.—Set out plants for heading and sow more seed.

Endives.—Set out endive plants.

Celery.—Do not let celery suffer for want of water. Earth it up as it grows, and take care in doing so, not to cover the bud or heart of the plant, and gather with the hand the stalks close and even together. Choose dry weather for this work.

Kale.—Sow a bed of Kale—Siberian Kale—for greens in winter.

Turnips.—Thin out and hoe turnips. Keep the soil light, loose and free from weeds. If the fly plagues them, use sulphur and plaster or ashes by dusting them when the dew is on, or sprinkle with whale oil.

Garden Seeds.—Save these as fast as they mature, and put away in paper bags and keep safe from mice and insects.

Cauliflowers and Brocoli.—Cultivate these often, and water well in dry weather, to insure vigorous growth and large flowers the coming month.

Corn Salad.—Prepare a nice bed made rich, and sow in drills 1 inch deep and 6 inches apart, and sow corn salad seed. As it grows work it, and thin out to 4 inches between the plants. This is one of the nicest and most delicate salads that we have, when dressed as lettuce. Those who have never tried it do not know what they have lost. It is not often seen in the Middle States; but once brought into use it will prove as popular as it is in Europe.

Garden Herbs.—Toward the close of the month, culinary herbs of all sorts may be set out, and, garlic, horse-radish, shallots, chives, and all other culinary roots and bulbs may be planted. It is the practice of some to sow a bed with onion seed, to be taken up next spring and set separately as onion sets.

OATMEAL.—Liebig has chemically demonstrated that oatmeal is almost as nutritious as the very best English beef, and that it is richer than wheat-bread in the elements that go to form bone and muscle. Professor Forbes, of Edinburg, during some twenty years measured the breadth and height, and also tested the strength of both the arms and loins, of the students in the university—a very numerous class, and of various nationalities, drawn to Edinburgh by the fame of his teaching. He found that in height, breadth of chest and shoulders, and strength of arms and loins, the Belgians were at the bottom of the list; a little above them the French; very much higher, the English; and highest of all, the Scotch and Scotch-Irish from Ulster, who, like the natives of Scotland, are fed in their early years with at least one meal a day of good oatmeal porridge.

For the Maryland Farmer

The Application of Manure.

The design of using manures of any kind is to add to the native fertility of the soil to such an extent as to enable the growth of a given crop without deterioration of the soil. As a rule, the success in the cultivation of any crop depends upon the amount of fertility applied, or contained in the soil. Otherwise the barren desert with its drifting sands would be as well adapted to cultivation as the alluvial deposit of river banks. The soil is the storehouse of fertility, which may be increased or diminished according to action of the farmer. Even though there may be an appearance of an abundance of fertility, any system of continual cropping, or lack of judgment in a proper rotation, may render such soil exceedingly sterile. The farmer who fails to restore to his soil an amount of fertility equal to or greater than the amount extracted by his growing crops is following a course that is suicidal to his farm and his own best interests. Among our best farmers, the belief prevails, that very much depends upon the mode of application of manure, subject, however, to conditions of climate and diversity of soils. The old practice of plowing manures deeply under the surface, placing it beyond any direct use by the plant at the commencement of its growth, at a time when it is most required, is now being very largely abandoned. Much more depends upon the placing of any manurial substance in such position as to either come directly in contact with the little rootlets, or that it can be carried directly to them by means of descending showers; now if a manure is plowed in six or eight inches beneath the surface, under ordinary circumstances, it is far below the reach of the first spreading roots; and even though as they spread and branch out, they may come in contact with the buried manure, experience has shown that the minute matters are the most prolific channel of fertility, and these are invariably near the surface, and so the plant is unable to reach the sustenance that was intended for it.

It may be claimed that in the case mentioned there is so much fertility stored for future use, which is partially true perhaps, but as a general rule it never becomes extensively available. It may be drawn up by some deep rooted plant like the clover, and in this lies the great benefit arising from the growth of this plant for green manuring purposes; being a very deep rooted plant it reaches down and takes hold of such fertility as ordinary plants fail of reaching, and being

plowed under shallowly, bring the fertility nearer the surface and within reach of other plants.

In general a manure should be well pulverized, and if spread upon the surface after plowing and harrowed or bushed in, it is in the most available position. This has been fully established by means of repeated experiments, and now a large proportion of farmers are in the habit of plowing their fields and then spreading the manure and manipulating as above indicated, and even some have practiced spreading upon the surface after plowing and trusting to subsequent cultivation to incorporate the same with the soil. Although satisfactory results have been obtained by this practice, it is questionable whether it is always a safe course to pursue, as in case of a dry season, manure would become so dry as to be unavailable, unless there occur showers. Fertility is taken up in a soluble state, and there must be sufficient moisture in the soil to dissolve the salts in the manure, or else it is unavailable to plants. That is why a frequent stirring of the soil is of benefit in that it causes an accumulation of moisture and consequently the dissolving of more salts in the soil.

Upon some well regulated farms is adopted the practice of carting all the manure as fast as it is made in the stable, either in summer or winter, or at least once a day to the fields where it is spread upon the surface and there left to all the action of the elements.

One thing is certain—in the economy of nature there is supposed to prevail a law, that nothing is absolutely lost, there is a compensation in all things with which the labors of man, if exercised in good judgment, must result in some benefit.

WILLIAM H. YEOMANS.

Columbia, Conn.

Beet-Sugar Industry in Maine.

The exertions which have been made in this State during the last few months to introduce this industry are followed up in a practical form, and in hundreds of places all over the State beet planting is going on and will continue for the next two weeks. The Maine Beet Sugar Company have contracted for the raising of sugar beets all over the State from Cumberland to Aroostook County, with hundreds of farmers. It is, therefore, not saying too much that the trial during the year 1878 will be a very extended and conclusive one, both in a practical and scientific point of view. The bulk of the beets which will be converted into sugar this year are contracted for in Aroostook County, around the town of Presque Isle. The

county of Aroostook, which is somewhat larger than the whole State of Massachusetts, was considered out of reach and a wilderness but a few years ago, but any man who understands farming and who will take the trouble to travel along the Aroostook river will find to his surprise that farms there look fully as thrifty as they do along the Kennebec and Saco rivers. Our townsman, George S. Hunt, Esq., who is president of the Maine Beet Sugar Company, has made every exertion to center the interest of this new industry in and around Portland. No doubt there is any amount of good and suitable land in the vicinity of Portland to keep several sugar factories employed. The number of idle manufacturing establishments invites occupation, and the many unemployed mechanics and laboring men in this city will welcome any new enterprise which promises work to them.—*Eastern Argus* (of May.)

In fresh farm-yard manure the most important constituent of its soluble portion is potash; of phosphoric acid and ammonia it contains but very small proportions. Rotten manure, on the contrary, yields to the solvent action of water large amounts of nitrogen and phosphoric acid. If good fresh farm-yard manure be dried at 212 deg. F., the soluble organic matters of the residue will be found to amount to from 7 to 8 per cent., and its soluble mineral matters to from 4 to 5 per cent. On the other hand, dry, rotten farm-yard manures contains from 13 to 16 per cent. of soluble organic matters, and from 5 to 6 per cent. of soluble mineral substances.

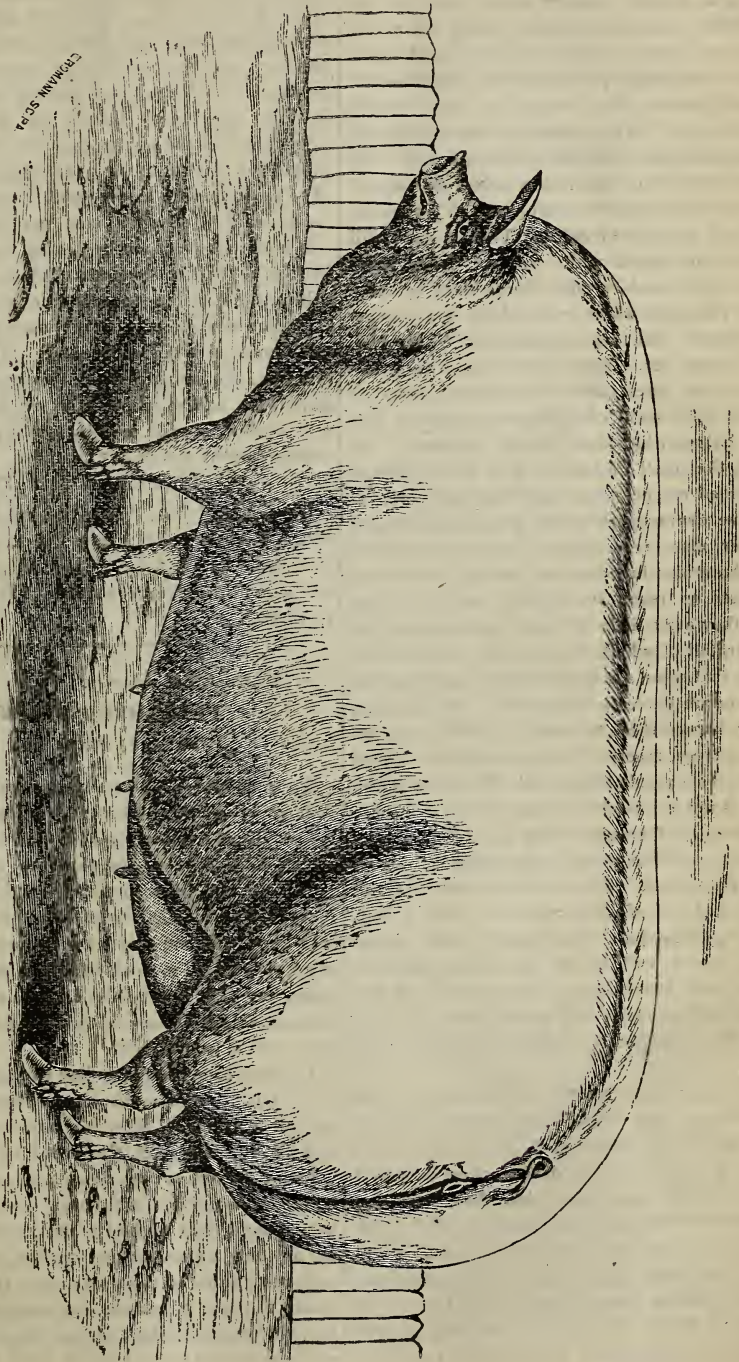
STRAWBERRIES.

Growers differ as to the advisability of fall or spring planting. A new strawberry plant needs a full season's growth to become strong enough to bear a full crop. If the early runners remain where they take root, they will bear a crop next spring. If they are rooted in pots, and transferred to another bed, without any disturbance of the roots, they will bear well next year. If ordinary plants be set next spring, they will grow all the season, and give a crop the year following. If set this fall, they will make some growth, give a few berries next spring, but not a full crop until the next year.—*American Agriculturist*.

Secretary of State Evarts has just sold from his Windsor farm yokes of oxen that weighed 5,150 and 4,851 pounds, and two cows that weighed 1,400 pounds each.

LIVE STOCK REGISTER.

YORKSHIRE SOW, QUEEN 3d, At nine months old.
W. ATLEE BURPEE & CO., Philadelphia, Pa.



For the Maryland Farmer.

Small Yorkshires.

In England, from whence come many of our best breeds of domestic animals, nearly every section has its favorite breed of swine, and these breeds are so strangely rooted in the affections of the people that it is hard to get the local inhabitants to change. When, however, more progressive breeders come to handle the breeds and compete at the different fairs, then arises the necessity of certain classes for entry—not so numerous as the local varieties of swine. Thus a class will be given for “small white swine,” “large white swine,” “small black breeds,” “large black breeds,” &c. Of the small white swine there are numerous varieties, such as Lancashires, Yorkshires, Eden, Suffolks, &c. These varieties are frequently crossed, and often different prominent breeders will have their own characteristic strains. The Earl of Elleven has done much to perfect and establish the small Yorkshires, and the specimens of this breed recently imported show very decided distinctive characteristics and general uniformity altogether most remarkable. In the hands of skilled American breeders, we believe this breed is destined to reach its highest perfection. At present they are a little irregular in the quantity of their hair, (all of which, however, is very *fine*), in so much that some are quite hairless, and the skin being thin are liable to “sun-burn.” We have not however, known them to mangle, and wherever we have sent them, received from purchasers almost unqualified approval of the breed. Their perfection of form is not approached by any breed, and there are millions of farmers to-day in America who would not credit the actual measurements of animals of this breed. They produce very uniform progeny, and it is of rare occurrence that a badly formed pig is known. Their great value to the average farmer will be in the crossing of pure males on large coarse-boned native stock. If farmers will only properly utilize this breed of swine it will result in a greatly increased wealth to our country.

The general characteristics of the small Yorkshires are *very short dished snout*, small head, low down, body *very broad* across the back, and *perfectly straight*, long and *square behind*, chest deep and full, ears *very fine* and thin, skin thin, hair fine and spotless white, bones extremely *small*, legs *unusually short*, hams *large thick* and *square*. Yorkshires breed remarkably true to the standard, there very seldom being a single badly formed pig in a litter. They are *always fat*, keeping in good condition on grass alone, some breeders even re-

marking that they will fatten on thin air. It is an established fact that Yorkshires will fatten on less than half the feed necessary to keep an ordinary pig of the same size. They have great power of assimilating their food, there is but little waste, and they are very quiet and contented in disposition. Their flesh is of so very fine texture and luscious sweetness. Harris on the pig says: “No animal of the pig species carries so great a proportion of flesh to the quantity of bone or flesh of so fine a quality as the small Yorkshire, or can be raised at so small a cost per pound.” That this is the case can not be denied, upon an examination of the fine specimens, when a glance will exhibit the extreme size and fine shape of hams, shoulders and chops, with the head, ears, legs, and tail, almost infinitesimally small. They are good breeders, producing eight to fourteen pigs at a litter. They will weigh, live at six months, 175 to 200 pounds; at nine months 250 to 350 pounds, at twelve months 300 to 475 pounds.

W. ATLEE BURPEE, Philadelphia.

[*Note by Eds. Md. Far.*—We are furnished also with a fine likeness of a pure Duroc, or Jersey Red Boar, bred by W. Atlee Burpee & Co., which we will give in the October number of the MARYLAND FARMER.]

For the Maryland Farmer.

PURE-BRED STOCK.

BY D. Z. EVANS, JR.

To some minds, especially amongst a host of old fashioned farmers, the breeding of pure-bred stock is looked upon as merely a pastime for persons of wealth to indulge in, and that the stock itself is only to be viewed as so many pets, kept, bred and reared for amusement more than for utility. We well know that the breeder of thoroughbred stock invariably likes his stock and often makes pets of them, but still is sensible enough to know that they are things of use and value, if farmers would only view it in that light.

It seems easy enough to buy and keep pure bred stock, but, to raise meritorious specimens, which will, in themselves, show an improvement on as well the superiority of the breed or breeds they belong to, requires experience, care and judgment. There are many men who have devoted the best part of their lives to the business, and have secured, not only a great reputation, but a substantial cash recognition of their services. It is not necessary to name them here, for nearly every state has, within her borders, one or more of the workers, who have labored long to raise the standard

of our live stock, both by careful, systematic breeding and by a liberal expenditure of cash to secure the best of stock obtainable, either in this country or in countries beyond the seas. Gradually, though very gradually in some sections, farmers are beginning to appreciate their efforts, and find that they are amply repaid by cautiously making use of some of his stock in improving their own.

Pure-bred stock of all kinds is now plentiful enough in nearly all sections to enable farmers to purchase thorough-bred males of nearly all kinds at moderate prices, animals which possess most, if not all, of the desirable qualities attributed to the breed to which they belong. There are, of course, animals of each breed, often no better in *real value* than others in the same breed, which command very high prices, in this instance Fashion having rated the valuation, on account of the animals having pedigrees which the fickle Dame decide as *the ones* to be sought for.

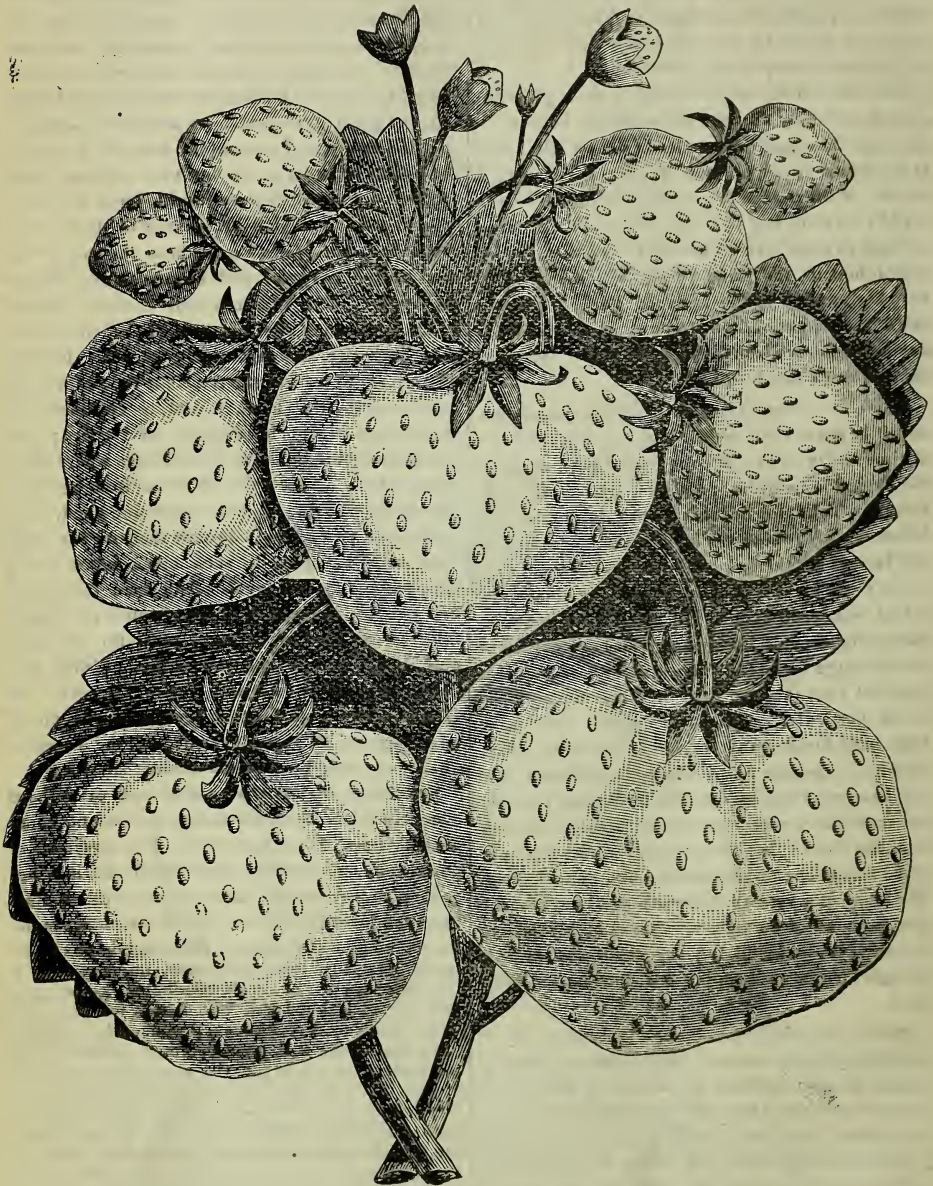
There are different breeds for different purposes, and it is worse than useless and also a great waste of time to try to find any one breed possessing *all* the desirable qualities possessed by all different breeds. Take, for instance butter dairy qualities. When we wish these, we look to the Guernseys or the Jerseys for them, for they have been bred so many years for this purpose, they have developed it to a wonderful extent; but then comes in a complaint that they do not make good beef cattle, or are not large for oxen. Very true, indeed, yet that does not alter the fact that they are unsurpassed in the particular qualities for which they have been bred for so many years. If you want large beef cattle, get the Short Horns (Durhams) and you have your desires satisfied so far, but you cannot reasonably expect much choice butter making qualities there. In exceptional cases, you may come across one or two choice ones, but not often. We know of a veteran dairyman who bought seven fine cows, all of the pure-breed and highly recommended, yet he found *only one* which was valuable enough for him to keep in his fine butter dairy herd.

And so we might run through the whole list of pure bred stock—cattle, sheep, swine, poultry, horses, &c., and still find the same rule hold good. Out at the West, where land is cheap and where the distance from large cities is great, it pays best to raise the large pigs, such as the Poland Chinas or the large Berkshires, but where the nearness to good markets will admit of it, more profit can be realized by breeding and fattening "small pork," for the demand is for such pork. Here those choice and refined pigs, the small English York-

shires come in to fill the bill, which they do to perfection. And also with sheep. The West seems to be the home of the hardy merinos, while the Cotswolds are also largely bred. Here with us the fine made South-Down sheep undoubtedly take the lead, principally on account of the demand of the choice and early maturing lambs for which this breed is noted. In poultry, the same thing holds good, and it is impossible to find large size and great laying qualities eminently combined; and to attempt to combine them by breeding the breeds together noted for each will not give any definite or satisfactory results, for it is a well established rule, which breeders will do well to remember, that the more violent the cross, the more varied, irregular and unsatisfactory will be the results. The Brahmas and Cochins, classed under the head of the Asiatic fowls, are noted for their large size, and are largely bred by farmers who prefer to market the fowls for the profit there may be in their flesh, when sold to consumers in the markets of our large towns and cities; and this is undoubtedly the most profitable where those farmers are a considerable distance from markets. Where the markets are convenient and good, there is always a paying and constant demand for fresh eggs, and they pay, in such cases, much better than marketing the fowls. And here the laying breeds come in for their share of public patronage, having been bred for so many years for this purpose, they excel in egg production. Under this head comes the Brown and White Leghorns, the Houdans and several other breeds, nearly all of which possess, in an eminent degree, the desirable quality of being good layers of large sized eggs.

Sometimes, owing to a want of cash, or perhaps owing to a lack of confidence in the benefits to be derived from the introduction of a specimen of pure-bred stock in their herds and flocks, it is not desired to buy enough animals or birds to start breeding pure-bloods, and then a few choice males can be bought and used on the common stock, the result invariably being a decided improvement if the experiment has been conducted knowingly, and the stock is fed and cared for properly. These half-blood specimens, produced by coupling full blood males with good common females, often are better, especially in the cow line, than full bloods, but they owe their great superiority to the infusion of the elements of merit given by the thorough-bred. Some persons try to use this—the fact that some half-bloods are better than full blood cows—as an argument *against* thorough-bred stock, but it is a decided *argument in favor* of it, for you must resort to it to obtain those desirable qualities. By all means use *only* pure-bred males, even if you do not go any farther, and you will be amply repaid for your extra outlay of money.

HORTICULTURE.



GREAT AMERICAN STRAWBERRY.

For the Maryland Farmer.

New and Popular Strawberries.

HOW TO GROW LARGE BERRIES.

There is a very general desire to know something more of the different ways of cultivating this fruit, and the question is often asked me "how can we grow the largest berries?" Now this question might be very easily answered if the questioners would only be a little more explicit and give some facts as to kind of soil, or what means are at their command to enrich and work it. What might be suitable advice to one, would frequently be just the contrary to another who might be differently, or not so favorably situated. However, the following rules will usually hold good:

If the plants are to be placed in the garden, then make the rows two feet apart, and the plants from twelve to fifteen inches distant from each other in the row. If to be cultivated by horse power in the field, then make the rows three feet apart. When planted in this way, the plants should be kept strictly "in hills," by which I mean that each plant should be kept separate, not necessarily hilled up, but the runners cut off as they appear, that the entire strength of the plants may go to the formation of fruit buds and of making good "crowns." A well enriched ground is of course important, but larger berries can usually be grown by this "hill system" on only moderately rich soil, if well cultivated and mulched during the proper seasons, than upon richer soil where the "matted row" system is employed. If to be grown upon a hot sandy soil, then it is usually safer to employ the latter system or broadcast way of growing them, though by using a heavy mulch of straw or cut grass, the "hill system" will still give the best results in the way of size. Large berries cannot however be grown from inferior varieties, as there is a greater difference between different varieties than many suppose. Natural merit will frequently show itself even if almost neglected, as some of the newer and finer sorts, if given only very inferior cultivation, will often yield berries of double the size of the "Wilsons" and others of that class. Among the most prominent of the newer berries is the

Great American.—A wonderful berry indeed it is, and this past summer it has revealed even greater merits than it had before. Last year a number of berries were grown, measuring fully nine inches in circumference. This year this measurement has been exceeded nearly one half. Many persons throughout the country are now growing "Great Americans," but like all good things, it has been extensively counterfeited, and many are the victims who have had spurious plants palmed off upon them. The genuine berries are very dissimilar from most strawberries, and very easily distinguished by a practiced eye.

Forest Rose, *Pioneer*, *President Lincoln* and *Essex Beauty* are all varieties of colossal size, and have the merit of ripening early in the season. They also give promise of being unusually desirable for market purposes, as well as for home use.

Sterling, *Golden Defiance*, *Dr. Warder* and *Kerr's Prolific* are good late varieties, but considerably inferior to the others in size.

In growing these large berries to the best advantage, care should be taken to have the fertilizers thoroughly intermixed in the soil. The very largest berries are nearly always obtained from one year old plants, or from those that have been set out the preceding autumn or fall. If planting in August or September, I greatly prefer to use plants started in pots, as they frequently yield from five to ten times as much fruit as the common runners. Others at a distance to whom I have sent these pot grown plants, report that they also succeed finely with them. Possibly at some other time I may be able to explain this new and deservedly popular method more fully.

R. H. HAINES.

Sangerites on-Hudson, N. Y.

For the Maryland Farmer.

STRAWBERRY CULTURE.

BY D. Z. EVANS, JR.

Whether spring or fall planting of strawberries are the best depends upon circumstances mostly under the control of the planter, tho' a very open season during winter is apt to act injuriously on them, the repeated freezing and thawing unsettling the roots and killing many of the newly set plants. To make a success of a plantation of strawberries set in the fall, it is necessary to have the ground in most excellent order, free from all grass, weeds and rubbish. This can best be accomplished by having the piece in corn, cultivating it thoroughly, which will usually leave it clean. It should then be plowed and thoroughly harrowed over, two or three times, to make it in good order for the reception of the plants. If the piece can be spread over with fine manure, well rotted, before it is plowed, so much the better, if not, fine manure or shovellings should be put into the furrows over which the ridges are made for the reception of the plants.

When the piece has been put into good order with the plow and harrow, with a one-horse plow draw furrows, the entire length of the field, about $4\frac{1}{2}$ or 5 feet apart, running back, with the plow, in each furrow to clean it out well, and then put a liberal quantity of fine, short and well rotted stable manure in these furrows just made, making a ridge over the manure as soon as possible, to prevent it from drying out; and these ridges can be left, if desired, for two or three days before plant-

ing, and should be left at least a day, to allow the soil to settle. Some use a small roller on the ridges for the latter named purpose, but we have found it objectionable in many ways, prominent amongst which is the increased difficulty of planting, it requiring nearly double the time to do the planting in a piece where the roller has passed over it that it does where the ground has been left to settle naturally, which is quite an item in a large plantation.

The planting is not very difficult, tho' there is quite an *art* in doing it so the plants will live. A hole is made with the hand in the soft soil, deep enough to take the entire length of the roots, the ground is then drawn to the plant, taking care not to cover the crown, and pressed down firmly. Pressing the soil firmly around the roots of the plants is absolutely essential to their growth, and most of those which fail to "stand" in a new plantation are invariably those planted by persons careless in this respect. It is just as easy to do the thing right, when once they get the "hang of it," and the "boss" should see that his planters do not neglect this very important point in planting, else he will lose far more plants than would pay for two good, efficient men who would do the work properly.

Evening is the best time to do the planting, commencing about an hour before sundown and continuing as long as it is light enough to see; or on a cloudy day, so as to give the plants a few hours in the soil before they have to endure the sun's rays. Where the plants have heavy and many leaves, it will be found to be a decided advantage to cut most of them off, for it will be much better for the young plants, else your plantation will show but a scattering few of live ones in a few days. Before setting out the plants, it is a good plan to steep the roots in a thick mud, especially if the ground they are to be planted in is dry, for it goes far towards insuring their growth. One boy will drop the plants as fast as two good planters can set them out, taking a row each side of him, and in this way a large patch can soon be set out, but do not let him drop them any faster than they can be set out, else the roots will soon dry out, under the combined influence of wind and sun.

The distance apart in the row depends considerably on the kinds set out, tho' eighteen inches is a good average distance to have them put, and is what we have adopted successfully. This is for what is known as "bed culture," where the runners are permitted to run and form a bed; and in such cases the runners from every two rows should be made to run together, making a bed of every two rows, having cleared spaces between the beds for the pickers to walk in, and thus prevent many berries and plants from being injured by pickers or hoes. In the "stool culture" of the strawberry, which but few growers have adopted, the plants are put about a foot apart in the rows, and all the runners are kept off them, the result usually being not so many berries but very large ones, and we are inclined to think that the net receipts are equally as large, if not larger, than from the same sized piece of ground cultivated in the other way. Aside from this, it is difficult, on account of the multitude of young plants, to cultivate the beds

orderly, where the runners are permitted to grow while the reverse is the case where "stool culture" is practiced. Large fruit costs no more for picking and for transportation charges, while it always commands a ready sale and at high prices, the supply never equaling the demand.

Clean cultivation should be practiced, commencing as soon as the weeds begin to show themselves, and done continuously thereafter. The benefits of mulching with coarse manure, straw or river grass, is not sufficiently appreciated. Strawberries require a great deal of moisture, during the short season of their fruitfulness especially, and mulching comes in to protect the soil from the direct rays of the sun, thus enabling it to retain its moisture. We have known the want of rain during the picking season to shorten the crop more than one half, and also reduce the size of the berries, while plantations near by, which had had mulch applied, did not suffer from the drought, so it can readily be seen that it pays well to mulch.

In regard to the varieties most desirable for market purpose, we would say that there is no variety which, in point of productiveness and profit, which surpasses the old and long tried "Wilson's Albany seedling." It is a sour berry, and not very desirable for table purposes, but is an excellent shipper, and its fair to large size and its bright, handsome appearance makes it sell readily at fair prices. There is considerable fraud about this variety, and planters must be careful who they buy from, or they will not get what they wish or order. The "Kentucky," the "Charles Downing," the "Jersey Scarlet" (a splendid table berry) are also most excellent sorts, and worthy of the attention of planters. They are tried and true.

Tea Culture in the United States.

So much has been written and printed upon this very important subject, that perhaps those who do not comprehend its value may almost feel bored by seeing it still further treated; but, have we not, for years, been bored and screwed down to the tune of many millions of money, (18 to 20 millions annually,) sent abroad to the Celestials for this article; and then not receiving as good an article as we can supply ourselves with at home, by a little garden care and effort?

We do not say that we can at once, nor do we advise farmers to launch largely into it and risk all they are worth on the single cast of the die; but that we *do* wish to say, and impress on readers, in the outset, and now, is, that nearly every person having a farm, or even a small garden, can raise all the tea needed for his family and for a few neighbors who may not have any land; and he can do it at less cost, and have better quality, than he pays and buys at the stores; and we believe we can here establish the fact, with a few plain words.

Some dozen years ago the writer of this gathered a couple of handfuls of *tea-leaves*, off a small tea-bush, about half-a-dozen years old, in this city; the leaves were dried in a tin-cup over a moderate stove-heat till they became a

brownish green, and were crisp or brittle enough to be crushed in the hands, then put into a cup, hot water poured on, and covered up and left to steep a few minutes, when we had a more delicious fragrant infusion, or "drawing," of tea, with finer aroma, than we ever before drank; and the little tree had stood out all winter, without any protection, and then put out its leaves early in the spring; hence, any man south of Lake Erie can raise such shrubs or trees as easy as he can raise a crop of gooseberries; there is no novelty or mystery about it; there is some difficulty, in the start, to get the plants, but the Department of Agriculture is forwarding the enterprise by sending out tens of thousands of plants to those who will carefully grow them, and extend the good work.

It is stated that from 200 to 400 pounds of good tea can be obtained annually from an acre of trees, after they are seven years old, when growing on good soil in favorable localities. Where it is made a commercial business, and at a good profit the seasons admit of two or three "picking" of leaves in a year. The growing young trees require as rich, deep, warm ground and well drained, as a luxuriant crop of large corn, and need much moisture liberal watering or irrigation, unless the season happens to be an unusually rainy one. And for several years they may grow as close in rows and hills, or about the same distance as large corn, and to be cultivated in much the same manner, keeping down all weeds, and then being well mulched with leaf mold or well-rotted manure as the warm season advances; but the ground should be often stirred.

Now, it can be seen that every family, with a dozen or twenty trees on a couple of rods square of good soil, could more than supply itself with enough of better tea than that which has been manipulated and adulterated for the commercial trade. We would not advise persons of moderate means to make large, rash investments in this infancy of the business; but we would advise all to make a beginning and supply their own immediate wants in this matter until it is better understood and introduced. The Agricultural Department will help on the work.

For a moderate scale, or small quantity of production, a cheap contrivance for drying and toasting the tea-leaves may be made, by taking a copper or sheet-iron cylinder, say two feet long and one foot in diameter, with axles at each end for it to roll on, something like a common squirrel-cage, but larger, with an opening at one end in which the leaves can be put, and then shut tightly. This is then to be partly filled with the wilted tea-leaves, leaving abundant room for them to roll and tumble about freely when this cylinder or toasting-oven is revolved over a lively but not high heat, made of wood, coal, or gas. These leaves are slightly wilted with steam, or warm

water, or in the sun, before being put into the toasting-oven. If the tea be steeped or "drawn" before going through this wilting and toasting process, it will give only a kind of herbaceous tasting tea, with none of the fine tea aroma.

For more than a quarter of a century tea has been raised and used by different parties in South Carolina and Georgia, and later for nearly a dozen years in California, and they have a better article, too, than is generally imported, as it is fresh and pure, not adulterated and deteriorated in preparation for export on a long voyage.

Reports of these early efforts and successes, in the Southern States, were published in the annual volumes of the Agricultural Department, more than twenty years ago. It is no new, untried or mysterious experiment, but has been fully and profitably established; some writers and newspapers, with a great flourish, treat it and speak of it as if it were a novel, uncertain, mysterious operation, just now for the first time developed by them.

True, as many thrifty pickings cannot be obtained in the short seasons of the North as in the longer ones of the South; but at least one good crop can be gotten in any locality where good corn will ripen. We shall give more tea in our next.—*The Floral and Fruit Magazine.*

Angus or Aberdeen Cattle.

We find the following in a report of the livestock department of the Exhibition in the *North British Agriculturist*:—

"This is indeed a proud week for Tillyfour and for the polled Angus or Aberdeen breed of cattle, Mr. M'Combie having been adjudged the £100 prize for best group of cattle, bred by exhibitor, and reared out of France; and the £100 for the best lot of beef-making animals, bred by exhibitor, reared and fed in any country; besides over £100 in ordinary-class prize-money, and several gold and silver medals. That is no doubt a great honor to Scotland's "cattle king," and a gratification to breeders of black polled cattle generally; but it is not all that has to be recorded to the credit of the "blackskins." Mr. M'Combie's successful group numbered six animals, and other six of the same breed, from Ballindalloch, not merely ranked second in the contest, but in some respects had prior claims to Mr. M'Combie's. The distinguished appearance which black cattle have made at the exhibition may be imagined from the fact that of the fifteen shown, twelve were the best of all foreign breeds, and the remaining three included the first and second-prize cows, and the second-prize aged bull. While there is thus a good rep-

resentation of polled cattle in every class, there is nothing approaching "a weed," which can hardly be said of any other breed of cattle. Every black polled animal has a ticket of some kind.

We agree with the suggestion of the Scientific Farmer, that American breeders should import some of this famous Scotch breed as profit will probably result from such an introduction of a breed that has been so conspicuous at the Paris Exposition, where Short Horns, Herefords, Jersey's and other breeds have been exhibited. There record is certainly wonderful, as reported above, when it is considered only fifteen were shown.

Breaking Colts.

The time to begin breaking a colt is when it is a suckling by the side of its dam. It should early be taught that it has nothing to fear from the presence of man, and that no harm will come to it from being fondled from head to foot. A very little pains at this period will soon make the colt perfectly gentle, and he may then be broken to lead by the halter, and to stand when tied. All his subsequent lessons should be by gradual approaches; the main point being to inspire him with confidence that he will not be harmed. He should be accustomed to the bridle by no means of the "bitting rig" before any attempt is made to ride him; and the mounting should always be made by "gradual approaches"—in the stall or the lot when the colt is perfectly familiar with all the surroundings. When it is desired to break him to harness, the same principle of gentleness, and care to avoid giving fright, should be practiced. Place portions of the harness on him at a time, and let him carry it in his stall until he finds that it will not harm him, then lead him out with the harness on, alone, and again by the side of another horse, also in harness. Accustom him perfectly to the use of the lines, then let him make the acquaintance of the sulky, and push it after him, until he has found that it also is harmless. By pursuing this system of gradual approaches with perfect gentleness of manner on the part of the groom or other attendant, there need never be any trouble in breaking the most fiery-tempered colt.—*National Live Stock Journal.*

THE MARYLAND FARMER.—We have received this deservedly popular agricultural book for the present month. Its pages are well filled with matter calculated to benefit and instruct the farmer. Published by E. Whitman, Sons & Co., Baltimore, Md., at \$1.50 per annum in advance.—*The Examiner of Frederick Md.*

OUR LETTER BOX

For the Maryland Farmer

QUINCE BLIGHT.

Last year a blight resembling pear blight appeared on some of my quince trees. In the fall I cut out the parts affected on most of them, and this spring I dug out one that was nearly dead. This season it has affected nearly all my bearing trees. I keep going over them and cutting out the affected branches, and more keep showing the disease. The leaves die and hang on, the bark turns black, and the wood sears and hardens. What is the cause? Is there any cause?

W. W. MEECH.

P. S.—Some of my friends here in Vineland have peach trees changing from early to late, or from late to early. Can you account for it?

W. W. M.

A KIND LETTER.—Mr. J. F. E. of N. C. enclosing his subscription, says:—I did not expect to take the Maryland Farmer but for one year, yet I have continued it for years and it has always been welcome, although I have been taking other agricultural papers nearer home, and the times are hard and money scarce, yet I cannot say stop it yet. Thanks Mr. E. for your kind words; we shall continue our efforts in behalf of the interests of the planters and farmers of the Middle and Southern States, in the prosperity of which sections we specially feel the deepest concern.

The height of a tree which stands so that its shadow can be measured may be ascertained by the following process: Set a stick upright—let it be perpendicular by the plumb line. Measure the length of the shadow of the stick. As the length of its shadow is to the height of the stick, so is the length of the shadow of the tree to its height. For instance: If the stick is four feet above the ground, and its shadow is six feet in length, and the shadow of the tree is ninety feet, the height of the tree will be sixty feet. In other words, multiply the length of the shadow of the tree by the height of the stick, and divide by the shadow of the stick.—*Ger. Telegraph.*

A LARGE YIELD OF WHEAT.—Messrs. Ellwanger & Barry, of Rochester, N. Y. threshed from eight acres an average of fifty and one-half bushels, less a fraction per acre. It was on ground that had borne nursery stock, was well drained, and deeply and thoroughly worked.

The friend whose farm in Virginia, we stated in our July number was for sale, has requested us to say that to relieve us of all trouble, he will answer all enquiries addressed to James F. Epes, Blacks and Whites, P. O. Nottoway co., Va. Our personal acquaintance and business relations with Mr. Epes warrant us in saying he is a gentleman perfectly reliable.

Fruit List for Southern Maryland.

An esteemed correspondents writing from Fort Washington Prince George's County, desires us to give a list of such pears, apples, peaches and grapes as are best suited to that region and are the most saleable in Baltimore market, and he wishes to know about dwarf cherries—will the Morello answer as well as the Mabaleb for stocks.

We answer the last enquiry first. We do not think that the Morello will answer for dwarf trees. The distance for dwarf cherries is 10 feet by 8 feet. Cherries grown on Morello stocks might do well for pyramidal or half-standard and should be planted 15 or 20 feet apart.

As to the selection of pears, &c., we should say that the better plan for one who is about to set out an orchard would be to procure a good treatise on fruits, such as the little work of Gregg or How to Raise Fruits or the larger work of "Barry's Fruit Garden," and also ascertain what fruits seem to do best in his neighborhood. As to which sell best in the markets of Baltimore and Washington, we can only say that all fruits which are of good taste, fair size and well handled, looking clean and unbruised, command at all times ready sales at fair prices. Fruits ill assorted, some rotted or bruised and all dirty and showing carelessness in the handling and preparation for sale, are not saleable even at prices too low to pay expense of transportation to market. All the profit in fruit growing may be said to consist in the care and judgment exercised in its preparation for market. Like poultry, an ordinary fowl will bring more money, if nicely picked and fixed up than a large fat one that has been mammoocked.

Another thing we would say in this connection, and it is this, that a new beginner should not have too great a variety of any kinds of fruits. Six or eight kinds of each class of fruits are enough to begin with. We shall perhaps next month say more on this subject, but at present can only give a list of a few of the best fruits, in our experience we have found to do remarkably well in Prince George's County Md,

APPLES.

Prince's Harvest,	Baldwin,
Red Astrachan,	Wine Sap,
Fall Pippin,	Roxburg Russett,
Winter Catlin,	Bell Flower.

GRAPES.

Catawba,	Concord,
Isabella,	Delaware,
Clinton,	Herbemont.

PEACHES.

Amsden June,	Heath Cling,
Early Beatrice,	Old Mixon Cling,
Old Mixon Freestone,	Lemon Cling,
Crawford's Superb,	Yellow Bareripe.

CHERRIES.

Yellow Spanish,	Black Tartarian,
May Duke,	Blach Eagle,
Napoleon Bigarreau	Tadescant's Black Heart

DWARF PEARS.

Dutchess De Angouleme,	Beurre Bosc,
Louise Bon De Jersey,	Vicar of Winkfield,
Easter Beurre,	Glout Morceau.

STANDARD PEARS.

Seckel (above all)	Bartlett,
Belle Lucrative,	Howell,

FINE SHEEP FOR SALE.—We by an oversight last month neglected to call attention to the advertisement of C. J. B. Mitchell, of Queenstown, Md., offering Cotswold Sheep for sale. Mr. M. has for years been a famous breeder of Cotswolds.

Attention is also called to the fine Cotswold Bucks advertised by Mr. W. T. Chase, of Kilmanock, Lancaster Co., Va.

The 25th annual Exhibition of the Montgomery County Agricultural Society will open at Rockville, Md., on Wednesday, the 11th of September, and continue three days. The management has issued a very spirited address and a long list of premiums aggregating to an unusually large amount.

CATALOGUES RECEIVED.

From Ellwanger & Barry, Mount Hope Nurseries, Rochester, N. Y., descriptive catalogues of Plants, Roses, Strawberries and Ornamental Trees and Shrubs. These several catalogues are well illustrated and some of them have beautiful colored engravings of flowers.

From Benson, Maule & Co., combined catalogue of Thorough-bred Stock, Seeds, Bulbs and plants, Philadelphia, Pa.

From William Parry, Pomona Nursery, cinnaminson N. Y., Strawberry, Raspberry and other plants,

THE
MARYLAND FARMER,
A STANDARD MAGAZINE.

DEVOTED TO

Agriculture, Horticulture & Rural Economy.
EZRA WHITMAN,
Editor.

COL. W. W. W. BOWIE, Associate Editor.

141 West Pratt Street
BALTIMORE.

BALTIMORE, SEPTEMBER 1, 1878.

TERMS OF SUBSCRIPTION

One dollar and fifty cents per annum, in advance.
Five copies and more, one dollar each.

TERMS OF ADVERTISING

1	Square of 10 lines or less, each insertion.....	\$1 50
1	Page 12 months.....	120 00
1	" 6 ".....	75 00
1	" 12 ".....	70 00
1	" 6 ".....	40 00
1	" Single insertion.....	20 00
	Each subsequent insertion, not exceeding four	15 10
1/2	Page, single insertion.....	12 00
1	Each subsequent insertion, not exceeding four	8 50

Cards of 10 lines, yearly, \$12. Half yearly, \$7.

Collections on yearly advertisements made quarterly, in advance.

CLUB SUBSCRIPTIONS—Any one who chooses to get up a club of ten, and sending us *ten dollars* will have a copy gratis.

In clubs of five or more, \$1.00 each; and names may still be added to the clubs already made up at the same price.

FARMERS! WRITE FOR THIS, YOUR SPECIAL JOURNAL, AND INTERCHANGE VIEWS WITH YOUR FELLOW FARMERS.

☞ Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors and suggesting to them to subscribe for it.

☞ To POSTMASTERS—You will see that the subscription price of the MARYLAND FARMER is \$1.50 per year; but you will be allowed a commission of 50 cents on each subscriber that you will send us; that is, send us \$1.00 and keep 50 cents on each.

☞ Now is the time to *subscribe* and *advertise*, when one half the year has gone, and we enter upon the last six months of the year; we shall send out a great many specimen numbers of our Journal to different sections of the country, that everybody may see it, and we hope, may appreciate its merits.

FIFTEENTH VOLUME OF
THE MARYLAND FARMER.

This is the ninth number of the 15th volume of THE MARYLAND FARMER; and we claim it has been published longer continuously, without cessation, by the same publisher, than any other farmer's journal in this or other States south of Philadelphia.

A popular magazine,—as attested by our subscription list, frequent kind letters from parties, and the notices of our brethren of the press in this and other Southern States,—and is also a *great advertising medium*, as shown by the numerous new advertisements in the present number.

During the present year, we shall allow nothing to prevent our making it superior to all former issues, and maintain beyond dispute its high character.

Its aim will be to admit nothing in its columns like Theory, unless based on science controlled by reason; nor anything called Practical, unless proved by successful experiments.

If our old subscribers will do us the favor to canvas for THE MARYLAND FARMER, by showing it to their neighbors and soliciting the subscriptions, they will confer a great favor on us, and we do not doubt, confer a greater profit on the new subscriber.

MAKE UP CLUBS.

To Clubs of five or more, with pay in advance, we will supply THE MARYLAND FARMER at \$1.00 each, per year.

Those who will send us \$2.50, during this month, shall receive two copies for the year.

Any one who will send us six dollars for six subscribers, shall receive a seventh copy for getting up the club.

These terms enable persons to get the Magazine at \$1.00 per year, postage paid.

YOUNG MEN!

It is an easy way to make money by getting subscribers for THE MARYLAND FARMER. Send 15 cents for Specimen Copies, and ascertain what Liberal Commissions we will allow.

ADVERTISERS.—While we are gratified to perceive from the large number of advertisements in the MARYLAND FARMER—increased monthly—that our journal is appreciated as a profitable medium, yet we are surprised that Farmers who have stock of all kinds for sale do not advertise more freely; merchants properly estimate the value of advertisements, while farmers lose hundreds of dollars by not doing as the merchants do. We have daily enquiries where poultry, eggs, sheep, cattle, horses, &c. are to be had, and at what price. We can not answer in all cases. It is true we have an agency ourselves for the purchase of such articles, but we would have our patrons deal personally with the owners, who advertise,

ATTENTION! SUBSCRIBERS!

Gentlemen, we do hope you will remember us when you are reaping what we hope is a bountiful harvest for each one of you in this year of plenty. All over the country the labors of the husbandman has been blessed with a noble reward, and we trust that as co-laborers we shall not be left unpaid.

We will send the MARYLAND FARMER from now until January 1st, 1879, to New Subscribers for forty cents. Our subscribers are requested to notify their neighbors of this offer.

MARYLAND FARMER,
Baltimore, Md.

EXCHANGE LIST.

Advertisements under this head of not over 40 words, describing and offering "*for exchange only*," will be allowed at 25 cents for each and every insertion. For every line extra 10 cents will be charged.

Editor of pigeon department Maryland Farmer, will exchange Antwerps, Fantails, Turbits, Owls, Jacobins and other varieties of fancy pigeons, for fancy poultry of all kinds. Prices low.

APOLOGY.—The advertisement of thoroughbred Shropshire sheep and Hereford cattle of Dr. W. H. DeCoursey, intended for last month's issue of the MARYLAND FARMER was by a strange mistake omitted, yet attention was called editorially to it. We regret the circumstance; yet, from the letters of parties asking information concerning it, we are led to believe that the *omission* has given greater notoriety than if it had been inserted, and we hope will thereby inure to the Doctor's benefit.

Maryland Jockey Club.

The fall meeting of the Maryland Jockey Club will commence at Pimlico on 21st of October and and continue four days. The brilliant programme issued will attract immense crowds to witness the sports. Every meeting has heretofore been a great success, and the perfect order and complete arrangement for the comfort of persons have given entire satisfaction to the throng of ladies and gentlemen who attend these meetings from every part of our State and other portions of our Union

THE STATE AGRICULTURAL AND MECHANICAL SOCIETY.—This association will hold its annual Fair on their Pimlico grounds on 24th, 25th, 26th and 27th of September. The large number of premiums and the immense amount of stock,

machinery and other articles that will be on exhibition—the easy access to the grounds by the numerous former facilities will be increased by a short branch railroad from the Western Maryland R. R. to the grounds. This great want has been supplied by this enterprising company at the solicitation of the energetic president of the society—Hon. J. Merryman.

The chief marshal—R. F. Maynard—will have complete arrangements for everything. His energy and long experience eminently fit him for this responsible position. Every farmer and farmer's family in the State should look on this society as belonging to them, and take a deep interest in its welfare. They should show their appreciation of its value to their interests and prove that they feel a laudable State pride, by being present on the occasion and bring some one or more articles for exhibition, whether it be an animal, a vegetable, a flower, or a specimen from the dairy, the poultry yard, apiary or of household industry and skill. There is no man or woman who visits a State Fair but can learn much by seeing and hearing—gain much information that will repay them tenfold for the expense of the visit to the exhibition.

THE GREAT AMERICAN STRAWBERRY.—The handsome illustration of this remarkable fruit we give through the polite favor of Mr. Parry, of Cinnaminson, N. J., and his description of it is correct as far as our own sight and taste justifies us in giving an opinion.

This is one of the very largest strawberries in cultivation, of a beautiful deep crimson color, fine flavor, very juicy, with a moderate amount of acid, carries well, bears its fruit well up from the ground, and continuing its berries large to the end, producing fine fruit very late in the season.

This plant requires a rich clay soil, and should be set out in July or August, and have high and thorough cultivation to produce the best results. Planted in Spring on poor sandy soil, without cultivation, it does not yield so well nor produce such large fruit.

TO CORRESPONDENTS.—While Mr. Whitman the senior Editor and Publisher is away at New Haven, attending as the Treasurer the National Agricultural Congress, the Associate Editor intends to take advantage of his absence, and go "bounding o'er the ocean wave," to the Hub of the Union, and after "doing" Boston, visit the great New England Fair at Worcester, Mass., 3rd Sept.; so our correspondents will please excuse us for not answering any letters until the 10th inst.

PUBLICATIONS RECEIVED.

We are largely indebted to Messrs. L. Prang & Co., art publishers, Boston, for parts 6, 7 and 8 of *Mechans Native Flowers and Ferns of the U. S.*, each part containing four colored plates of life-like wild flowers, and 16 pages of clearly printed instructive matter expressed in charming style. This work should be in every household where the natural flora of our whole Union is prized. It will interest the old or the general reader and stimulate the young to a better acquaintance with the botanical knowledge that will enhance much the pleasure derived from viewing the flowers of the field and forests. We can commend this work highly.

SUNDAY AFTERNOON.—This excellent monthly for September is a rich number. No better reading for leisure hours on Sundays. Price, \$3.00 per year, published monthly at Springfield, Mass.

THE MANUAL OF GEORGIA.—By Dr. J. P. Janes, Commissioner of Agriculture, for the use of immigrants and capitalists. This is an excellent work, highly creditable to the research and industry of the learned Commissioner, and will prove of great value to the State of Georgia, and should be followed as an example by other States, who like Maryland, are sadly wanting in a proper regard to the interest of the State in not setting forth to the world the various advantages to immigrants and capitalists which may accrue by settlement within her territory.

ECONOMIC TREE PLANTING.—By B. G. Northrop; published by O. Judd & Co., N. Y. This will be found to be a well written and instructive essay upon this subject which is now attracting largely public attention.

Schools of Forestry, &c., by the same author and same publishing house.

FROM ORANGE, JUDD & Co., 245 Broadway, New York, Illustrated Catalogue of Rural Books. It is elegantly gotten up and profusely illustrated. It ought to be in the possession of every one who wants to get the best books on rural subjects.

INTERNATIONAL REVIEW.—The September number of this able Review will contain an article on the engrossing question of Labor.

President Chadbourne of Williams College has written a solution of the Labor question for the September number of the *International Review*. Dr. Chadbourne has the reputation of having given special attention to the political and social questions that have agitated the country. This article of Dr. Chadbourne will be looked for with great interest by all who are interested in solving the vexed question as to labor and its employment and rewards.

The Old Maryland State Agricultural Society.

"As some writer has *attempted*, in a contemporary journal, to give a history of this association, of which the late HON. CHAS. B. CALVERT was the first president, we have deemed it our duty, in justice to the *living and the dead*, to present in as brief a form as possible a *true* account of its origination, and the part taken by the founders in establishing this organization, which continued successfully in operation until the breaking out of the late war. The record from which we shall mainly quote will be found in the *American Farmer* for 1848, then as now published by the senior editor, upon whom was detailed the bulk of the labors of the society, except during and about the time of the holding of the State shows"

The above extract we take from a contemporary journal. The italics are our own. We may be over sensitive, but this looks very like an insinuation that "some writer" in his "attempt" to give a history of the Old State Agricultural Society, has not given a veracious history, and lacked in "justice to the living and dead." The "some writer" undertook the agreeable task of collating facts of importance connected with the origin, and continuance of the Maryland Agricultural and Mechanical Association from its beginning down to the coming Exhibition, at the instance of some of the original members of the Association, and we are happy to know that so far as he has progressed, his effort has received the most flattering commendation of many who were active participants in the enterprise from its inception, and also of those who are descendants of those noble founders of the Institution. The author was himself at the time familiar with the important transactions of the Society and an ardent participator in every movement calculated to advance the prosperity of the Association, by which the agriculture of the State was to be so much benefited. In this labor of love he has been promised the aid of gentlemen of ability who were all the time closely connected with the business affairs of the Society. It was his design, with their help, reference to the public journals of that day and his own personal recollections, to set down naught in malice, nothing colored by partiality or prejudice but detail, in the order of their occurrence, facts of importance, prominent features of the scenes then enacted with such social anecdotes and little biographical notices as would be likely to enliven the dull routine of the work then performed, and revive pleasant recollections of the past. While passing in review the actors of that day, he might occa-

sionally pay a tribute to friends who have gone from the scenes of their labor and do justice to their revered memories, he would not speak of the living, beyond simply recording their acts, leaving their merits to the judgment of his readers. To eulogise the living, he felt would look like time-serving and incur the censure if not the disgust of sensible critics.

At the proper stage, in his opinion, of the history he was writing he was going to notice properly the efficient services and energetic discharge of official duties rendered by the Secretary of the Society, as well as the votes of thanks passed for the able and highly valuable services rendered by some *other officers*. But, as Mr. Sands has taken this duty upon himself, at least so far as the *Secretary* was concerned, it relieves "some writer" from entering fully upon the methods adopted by the Society, to show their appreciation of the satisfactory manner in which the *bulk of the labors of the Society* had been performed by the accomplished Secretary.

Following the paragraph we have quoted, there is a long statement of facts given as "mainly" quoted from the "American Farmer" for 1848. Therein, is not an important fact stated, which was not given in the first chapter of the History of the Maryland Agricultural Society. But a careful examination of the authority referred to, does not show us that the Secretary was called by the Worthington Committee to nominate officers, for consultation, or that the "venerable Col. Nich. Goldsborough" was called to "halt" the committee, and reconstruct the list by substituting Calvert for Glenn and making a place for Judge Glenn by the Secretary. This peep into the inside history of the Society which the author of the article in question has afforded us, would be an interesting episode in the biography of Mr. Sands, but we do not deem it very important in a plain relation of historical facts, unless it be thought necessary that it be established as a fact that Mr. Calvert owed his election to the promptness and *influence* of Secretary Sands, rather than to the *sound judgment of the committee*, as recognizing him to be most suited of all men for the position, and at the time the most agreeable to the public wish.

Nor was it deemed necessary to cumber up the history with the resolutions of Mr. Walsh and Mr. Key; the former proposing that Mr. Sands be presented with a testimonial for his services in behalf of agriculture, and the latter proposing that the members pledge themselves to do all in their power to extend the circulation of the American Farmer in the United States. There is no doubt

that as it was the only agricultural paper in Maryland or in the South, and was energetically conducted, it was warmly recommended by ardent agriculturists, and thus was mainly built up and fostered by the Old State Agricultural Society, therefore Mr. Secretary well might perform "the bulk of the labors," reaping such rich rewards.

Our cotemporary of which we are informed Mr. Sands, the then Secretary of the Society, was and still is senior editor, gives us another pleasant story about Mr. Kirk anticipating the wishes of the Society and presented a silver goblet to the Society, which was given to Mr. Sands and in lieu of the one the Society intended to buy, \$100 in gold was put in the Kirk goblet and presented to Mr. Sands, who passed it over to his "better half." Now, this is a very pleasant reminiscence, but we cannot see how this even makes any more "true," the account of the "origination" of the Society, or does any more "justice to the living and the dead," than what was "attempted" by "some writer" in a "cotemporary." Nor does in our opinion the omission of "some writer" to relate these anecdotes necessitate the "duty" of a cotemporary, "to present in as brief a form as possible a *true* account of its origination."

History of the Maryland State Agricultural and Mechanical Association.

CHAPTER III.

During the evening meetings of the society in October, 1849, Col. J. W. Ware, of Virginia, who was one of the earliest importers of fine sheep from England, and still does good work for agriculture by his writings in the MARYLAND FARMER and the agricultural journals of Virginia, offered the following, which was adopted:

"*Resolved*, That when any implement of agricultural interest, or machinery, shall have taken the first prize of this society—should it hereafter, in the estimation of its appropriate committee maintain its pre-eminence, a certificate of the fact shall be awarded it—but should any other of the same character challenge such implement or machinery, for mastery, upon three months notice being given the society, a premium shall be offered for the successful competitor—equal to the high prize of such article for such year, such challenge prize not to exclude the challenger from the 1st prize also."

This is a good rule, and should be adopted by the existing State society.

Mr. N. B. Worthington, of A. A. Co., from the standing committee on inspections, submitted a well written report suggestive of a memorial to the Legislature, "on the subject of a law for the inspection of the various fertilizers now in use—repealing the present laws, and providing such guards as in their wisdom, shall be deemed necessary to protect the agricultural interests of the State." At that time, the fertilizers were few, lime, plaster, ashes, bones and manufactured compounds of soda, potash, &c. The Chappell salts, the Ellicott agricultural salts, Horner's bone dust and Kentish & Co's prepared guano were about all the commercial fertilizers then manufactured in Maryland. Since then their name is Legion.

On the third day of the exhibition, the Hon. J. Alfred Pierce delivered a very able oration, eloquent and chaste in diction, and full of practical facts and suggestions. The crowd was very large; Gen'l Taylor was present, with other distinguished guests from neighboring States.

A shower suddenly coming up, Gen'l Taylor took shelter in Mr. Whitmans large machinery hall, and while there among other things he looked at, seemed so delighted with a 4 tine steel fork, that Mr. Carroll Walsh bought it and sent it to the White House stables for the benefit of the General's war-horse, "*Old Whitey*."

The show of cattle was superlatively excellent, consisting of the herds of Mr. Calvert, Capron, McHenry, Holcomb, Bailey, Perine, Dobbin, Slingsluff, Cox, Ridgely, Merryman, Clement, Howard, Jones, Bowling, Coad, Kemp, Thomas, Mann and others; but the fine Devon herd of Maryland, or *then*, of the United States, owned by George Patterson, Esq., was not exhibited, which was much regretted.

The cattle represented Durhams, Devons, Holstein, Jerseys, Ayrshires, Grades and natives. Gen'l Henderson, of Va., exhibited an enormous fat ox, over 3,000 lbs. live weight, being a cross between a Durham bull and native cow.

The premium for the best bull of any breed, which had previously taken a premium of the society, was awarded to Col. Capron for his Short-Horn bull, "Valentine," and for the best cow of any breed, to Col. Ramsay McHenry

for "Mary Queen of Scots"—an Ayrshire cow; Col McHenry received, also, the first premium for butter from his extensive dairy in Harford, in charge of Mrs. Frizzel. We are grieved to say that almost at the moment of writing this we are informed of the death of Col. McHenry, after a lingering illness, aged 65, at his homestead in Harford county. Col. McHenry was noted as a genial gentleman of the "old school," and a man of incorruptible integrity in all things. He was one of the active originators of the Association, and while his health permitted, continued to manifest an ardent interest in its affairs and in the progress of agriculture in general. He was a noted breeder of thorough-bred Ayrshire and Alderney cattle, Berkshire hogs and Southern sheep, for which he received many premiums at the different fairs in and out of the State. As a politician and farmer, his example may well be imitated, while his loss will be deplored by the agricultural community.

The display of horses was not large, but choice. Mr. Lyles got 1st premium for stallion for quickdraft, Mr. J. McHenry for same, for saddle horses, Mr. Winchester for best Jack, and Col. Capron for best team of mules.

There was a small show of swine, though some were excellent specimens. White Chesters were most numerous, and exhibited by Messrs. Sinclair, Corner, Martin Goldsborough, Cox, Wahn and Clements. A cross of Chester and Leicester by Mr. Cox, and a fine China boar was shown by Mr. W. B. Dobbin; all the gentlemen named received premiums.

The poultry was excellent and of many different breeds. The chief exhibitors were Messrs. Somerville, Cox, Bowers, Dobbin and Clement, of Philadelphia.

One of the most notable features of the meeting was the plowing match, to test the qualities of various plows and the skill of the plowmen. Nearly all the plows then exhibited have gone out of use, or have been so improved that other names have been given them. The excellent arrangements for this ploughing match were due to Mr. E. Stabler, of Montgomery, who was then as now, tho' an octogenarian, an energetic and cultured farmer.

Sheep.—Those who were recipients of premiums, were Messrs. Reybold, of Del., J. W. Ware, of Va., A. Clement, of Pa., H. Carroll

and W. B. Dobbin, of Md. The committee in closing their report, say—"Much credit is due to all the competitors for the handsome condition of their respective animals: and to Col. J. W. Ware and Messrs. Reybold and A. Clement, your committee think, too much praise cannot be given for the magnificent specimens exhibited by them."

The ladies won high encomiums for the quantity, excellence and beauty of the display of household manufactures. The large hall was a brilliant and animated scene.

The flowers and fruits were sparse, but fine in quality. These were in charge of that eminent, and at present, *patriarchal* florist, John Feast, whom the society complimented by a vote of thanks for his efficient services. Mr. Feast exhibited a splendid collection of exotic plants in pots, dahlias and roses, and a tastefully laid out miniature garden surrounded by a cypress hedge and planted with choice flowers and evergreens. This little garden was very attractive.

A special premium of \$3 was awarded to Grafton L. Dulaney, Esq., of Baltimore, for specimens of a native seedling peach, to which the name of "Baltimore Heath Peach" was given.—"These specimens were taken from the parent tree, Wednesday, Oct. 10th, 1849. The largest weighed one pound, and measured 12½ inches in circumference. This is the second year the tree has borne fruit. It bears abundantly."—*Am. Far. Nov.*, '49.

There was a very superior collection of vegetables, reflecting great credit upon the numerous exhibitors.

Among the unusual sights was that of Mr. Lewis Bayley, of Va., driving a pair of working heifers, under 2 years old, well broken to the yoke, with also a pair of cows 10 to 12 years old, accustomed to the yoke. They were used for all purposes of steers on the farm. We first made Mr. B's acquaintance when he, with his family, were on their way from New England to Fairfax Co., Va. He had a neat wagon, drawn by two handsome Devon cows, that had hauled the wagon with himself and family all that distance, furnishing plenty of milk to the inmates of the wagon. With this Yankee pluck and economy, he has become a prosperous farmer on a large property of his own in Va., converting worn out lands into

fertile fields of grain and rich pastures for his herds and flocks of improved breeds of cattle and sheep. He has justly been considered a benefactor to that region of country.

It was at this exhibition that Mr. Reybold showed a two year old fat Oxfordshire wether raised and fattened by himself which weighed 276 lbs. on the hoof. It was bought for \$100 by Mr. Mayberry Turner, slaughtered by F. S. Turner and served up, by Mr. Jackson, of the Eutaw House. A year before Mr. Turner—a leading sheep-butcher of Baltimore city—had banteringly told Mr. Reybold he would give him \$100 for any wether that would weigh nett 200 lbs., so Mr. R. produced this one and Mr. T. promptly made good his word. Mr. T. said when he offered the banter he believed that it was impossible for any such wether ever to be produced. Had Mr. Turner have lived to this day he would have seen that weight much exceeded.

There was an extensive and splendid exhibition of agricultural machinery and implements. Exhibitors from many other States than Maryland were present and had excellent collections, but Baltimore was certainly at that day the very emporium of manufacturers of farm machinery, and still keeps up her reputation in that line of business. Messrs. E. Whitman; R. Sinclair, Jr. & Co.; A. G. Mott; Maxfield, Mott & Co.; C. H. Drury; Geo. Page; Murray & Co., &c., were the exhibitors from Baltimore; Atlee & Blythe from Carroll Co., and others. Most of the exhibitors shared in the premium honors, E. Whitman again carried off the premium for the "best and most numerous collection of agricultural implements with description thereof."

The testing by tasting the Maryland hams was a very pleasant incident, and to the epicurean judges—Gov. Pratt, Judge Crane, Messrs. Bowling, Sothoron, and others who were called in to assist, among whom was President Taylor—seemed highly interesting and particularly agreeable. The ladies, inspired by the excitement caused the year before by the offerings of choice hams, determined each for herself to show her utmost skill in curing and cooking hams, which would claim fairly the high meed of a premium. A very competent committee was selected and the contest was close. Ham slices were eaten

alone, then with premium bread and butter, and then tested with premium wine as a solvent, and after due deliberation the numbers by unanimity was placed on the several hams, when it was found that—

Mrs. D. M. Peine had the 1st Premium,

Mrs. W. W. Bowie had the 2d “

Mrs. G. W. Dobbin had the 3d “

Mrs. S. J. Sommerville had the 4th “

But indeed there was hardly a shade of difference among them, and those which belonged to other competitors were of the choicest kind. This exhibit of a dozen or more hams from different sections of the State, was a great triumph for the reputation of Maryland ladies as accomplished house-keepers. President Taylor pronounced them—so reported by the committee—“As good, if not the best he ever tasted.” This generous rivalry on the part of our lady house-keepers at once put beyond cavil the great celebrity of Maryland sugar cured hams, which happily is still worthily maintained by our lady friends throughout the State.

After the delivery of the annual address by Mr. Pearce, all the premiums awarded by the several committees, as the Secretary called out the names, were delivered by the President to the recipients. These premiums were all, according to the amount of premium, articles of silver or gold.

When the election of officers for the ensuing year was in regular order, Mr. Calvert rose and begged to retire from the presidency; his remarks were touchingly eloquent and deeply impressed his hearers, who unanimously and loudly opposed his declension. Dr. J. O. Wharton, in his admirable and felicitous style, made a few remarks highly complimentary to the services of President Calvert and the great importance to the well-being of the society of the continuance of Mr. Calvert in his responsible position, put the question, and every member responded with hearty acclamation. The applause continued until Mr. Calvert gracefully, but with much emotion, evidencing deep feeling, accepted the office which had been forced upon him unanimously. He sat down amidst long and loud applause. All the old officers were re-elected.

“When the nomination for Treasurer was announced, Mr. Gill arose, and asked permis-

sion to read some resolutions which he had prepared to lay before the society—and remarked, that it was impossible for him to give that attention to the duties of the office which their importance to the interest and well being of the society demands, and asked to be excused therefrom. He then submitted the following:

“*Resolved*, That the Treasurer of this society be and is hereby required to attend all the meetings of this society; to be vigilant and active in collecting all dues of this society; and under the direction of the President to pay all expenses; to attend all Exhibitions, and generally to do such matters relating to the business of the society as the President may direct: the said duties to be in addition to those heretofore affixed to the said office of Treasurer.

“*Resolved*, That the Treasurer by and with the approbation of the President, be and he is hereby authorized to employ collectors and agents, in the various counties of this State, and in the City of Baltimore, to procure subscribers and collect their dues: Provided, however, that the compensation to said agents and collectors be paid by the Treasurer out of the salary and commissions allowed him by the resolution hereinafter proposed.

“*Resolved*, That the sum of ——— per annum be allowed and paid to the Treasurer of this Society; and also a commission of ——— per cent. on all sums of money collected by him, or his agents or collectors, directly from the individual subscribers of this society.

“*Resolved*, That the President of this Society by and with the advice of the Curators, be and he is hereby authorized to remove the Treasurer and substitute another in his place, and that in the event of such removal, the Treasurer thus removed, be paid only to the time of said removal a fair proportional part of his year's salary; and that the President and Curators be and they are hereby authorized to require such security from the Treasurer as they may think necessary, and as often as they may think proper.

“Mr. Key moved that the first blank be filled with \$150

“Mr. Oden Bowie moved \$100, and the second blank with 10 per cent. Various other amendments were offered and withdrawn, and the motion of Mr. Key was finally concurred in. The second blank was then filled with 10 per cent, and the resolutions, as amended, were adopted.

“The committee then substituted the name of James McNeal, of Baltimore, as Treasurer, and the nominations were confirmed by the Society.

“Mr. C. P. Holcomb offered the following resolutions, which were read and adopted:

“*Resolved*, That the committee appointed to memorialize Congress be also authorised and

requested to draw up an Address setting forth the advantages to the cause of agriculture, of the great Annual Exhibitions to be held at the city of Baltimore,—a central position,—in which particularly the States of Pennsylvania, New Jersey, Delaware, Maryland, Virginia and North Carolina shall be represented, so far as their agriculture is concerned—enabling the agriculturists of these States, by comparisons of mode of tillage, stock, implements, seeds, and productions generally, to confer direct advantages upon practical agriculture—while this great annual central congress of farmers would, by reports, discussions, and memorials, illicit valuable for the Home Department of our government, thus acting in concert with the great Agricultural Society of the State of New York, and the Agricultural Societies of New England, in making contributions to a common cause.

Resolved, That the committee in their discretion are requested to institute a correspondence with prominent agriculturists in the above States, with a view to their co-operation—with a view to obtaining members to this Society whose numbers, if they shall fall short of the six thousand names belonging to the Society of New England, may yet be made at least to equal those belonging to the admirable State Society of New York, whose beneficent influence has been so far extended, so generally acknowledged.

“Mr. N. B. Worthington offered the following resolutions, which were adopted :

Resolved, That the thanks of the Society are due to Mr. George W. Dobbin, the Corresponding Secretary, and Mr. Samuel Sands, the Recording Secretary, for their very efficient services during the past year.

Resolved, That the thanks of the Society be tendered to George M. Gill, Esq., for his generous and efficient services as Treasurer for the past year, and that the Society regrets that circumstances make it necessary that he should resign the office.

“Mr. Sands offered the following resolution, which was adopted :

Resolved, That the thanks of this Society are due and hereby tendered to Charles R. Carroll, Esq., for his liberality in granting the privilege to the Society of using his beautiful grounds, on which to hold their exhibition—and that he be and is hereby unanimously elected an honorary member of this Society.

“Mr. Dobbin, of Howard District, offered the following, which were adopted :

Resolved, That the thanks of this Society be tendered to the Hon. J. A. Pearce, for his able and eloquent address delivered before the Society this day, and that a committee of three be appointed to wait on Mr. Pearce and request a copy thereof for publication with the proceedings of the Society.

“Committee—Messrs. Carey, Dobbin and Worthington.

Resolved, That the thanks of the Society be tendered to the various railroad and steamboat companies of this city, for their liberal arrangements for the transportation of visitors and articles for exhibition, to and from the late Fair.

Resolved, That the thanks of this Society be tendered to the Hon. John Delafield, of New York, for the specimens of draining pipes and tiles presented by him to the Society, and deposited in their rooms; and that his laudable and patriotic efforts to introduce this important improvement into American agriculture are entitled to the grateful approval of all farmers.

“Mr. Walsh offered the following resolution which was adopted :

Resolved, That the thanks of the Society are eminently due, and are hereby respectfully tendered, to the ladies who kindly took charge of the department allotted to household manufactures, for the taste and industry evinced by them in the arrangement and display of the different articles exhibited, thus making it one of the most interesting features of our agricultural fair.

Resolved, That thanks be also tendered to Mr. J. Feast, for his superintendence and arrangement of the floral and horticultural department.

“Also to the Independent Blues, for the loan of their tent for the use of the several committees;

“And to Mr. Chester Coleman, for his beautiful models of picket fence, exhibited at the Fair and now deposited in the Hall of the Society.”

An important resolution, offered by Mr. Goldsborough, was adopted, and should be this year renewed by our present State Society :

Resolved, That the President be requested to make arrangements with the U. S. Marshal for this district, by which the number of sheep killed by dogs in each county of the State, with the value of the same, shall be ascertained by the deputies engaged in taking the next census; and embody the same, if possible, in the next census returns, and also report to this Society.

The Society then adjourned.

Of the success of this meeting, we cannot better write than to quote what the Baltimore *American* said at the time :

“We but echo the general voice in saying that it is one of the largest, most extensive, and most varied that has ever been held in this country. In the superior character and variety of stock exhibited, we have been

assured by those who visited the late State Fair at Syracuse, New York, that our own bears off the palm—an acknowledgement which is most gratifying, and which goes to show how much can be accomplished, in even a short time, by the well directed efforts of those who are in earnest in the execution of what they take in hand. If the idea had been thrown out two years ago, before the organization of the State Society, that such an exhibition could be got up in Maryland, how very few would have given credit to its possibility. To the founders and supporters of that Society is due, in a great measure, the credit of the results which have already been achieved, as well as of those which may be expected to follow from the present awakened feeling in regard to agricultural interests which pervades the State.'

Last month we received several short but very pleasant visits from Mr. A. A. Hopkins, the genial Editor of the American Rural Home of Rochester N. Y., one of the neatest printed and best of our exchanges. In reply to our queries, he charmed us with graphic descriptions of his city and its prominent men, speaking warmly in praise of their enterprises. Rochester must be a delightful place for a florist or horticulturist to visit. It is the home of Vick, the floral king, of Briggs and brothers and other seedsmen, and of those eminent writers and practical horticulturists.—Ellwanger and Barry—whose beautiful and extensive grounds are the admiration of all who have seen them, and whose long established reputation have won for them a national trust and confidence.

DOMESTIC RECIPES.

TOMATOES AND CORN.—To one quart of tomatoes, peeled and sliced, add six ears of corn cut from the cob. Put the corn in the tomatoes after they have boiled a quarter of an hour, and season with one teaspoonful of salt, half a teaspoonful of pepper, and a tablespoonful of butter, and a teacupful of cream; let it boil a quarter of an hour longer.

AUNT ADDIE.

COLD FRITTERS.—Beat two eggs very light, blend with a little milk two tablespoonfuls of sifted flour and one of sugar, then add one cup of milk, the beaten eggs and two tablespoonfuls of corn kernels; mix well together, drop the batter from a spoon into hot lard. When light brown turn them quickly, and remove them with a skimmer.—Place them on a clean cloth to drain; pile them one against the other on a platter, sprinkled with powdered sugar. They are then ready to serve, and they are excellent eating.

FRIED CUCUMBER.—Having pared the cucumbers, lay them in very cold water for half an hour. Cut them in slices, about as thick as a dollar, lengthwise. Dry them in a cloth. Season with pepper and salt. Melt some butter in a frying pan and when it boils, put in the slices of cucumber and fry them to a light brown. Send it to table very hot.

AUNT ADDIE.

COFFEE CUSTARD.—Boil a large cupful of freshly ground coffee in one pint of water five minutes; and one cupful of cold water, and let it stand ten minutes to clear; then turn off into a sauce-pan, and one pint of sweet cream, and give it one boil. Turn it over the beaten yolks of eight eggs, and the whites of four, with one cupful of sugar, in a pail, stirring fast; set the pail in boiling water, and stir till it thickens. When cool, pile on top the whites of the other four eggs, beaten stiff with a cupful of white sugar, and you will have a dish fit for a king's table. If put in a glass dish, it is very handsome. If the flavor of chocolate is preferred to coffee, substitute three tablespoonfuls of grated chocolate, boiled in half a pint of water.—*Country Gent.*

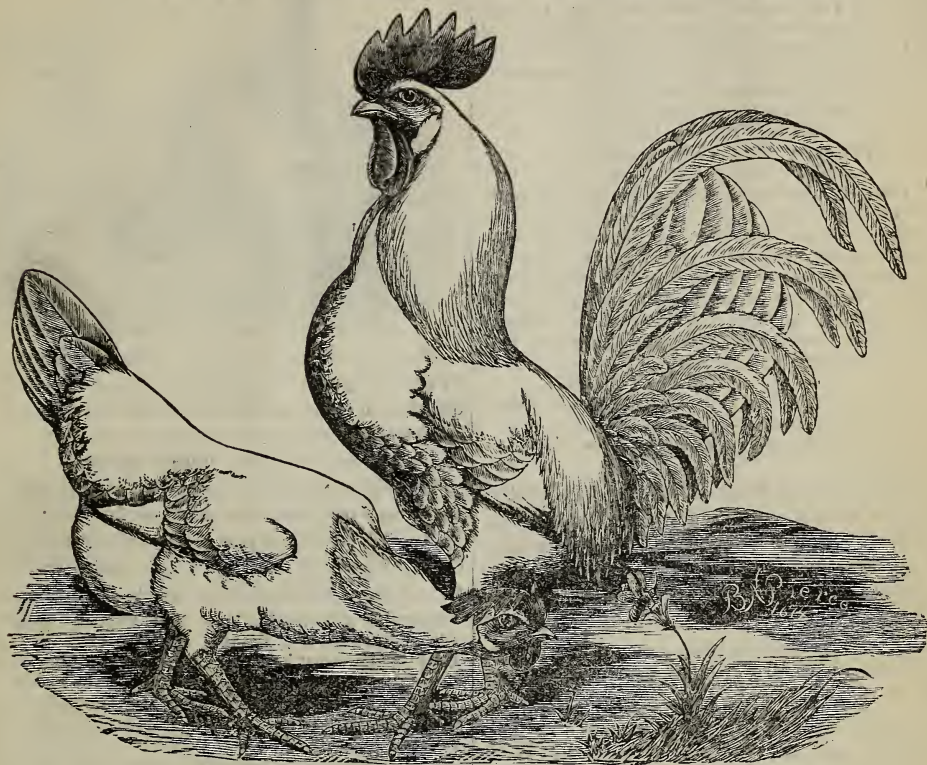
CHICKEN PIE.—Boil until tender two chickens in just enough water to stew them. Make a nice crust, as for buttermilk biscuit, only a little richer; line a deep dish with it; when the chickens are done remove all the bones; put the chickens in the dish in which they are to be baked; thicken the gravy with a little flour; add a can of oysters; season with salt, pepper and butter; cover the pie with a crust, and bake quickly. This is very nice.

BRANDIED PEACHES OR PLUMS.—Gather peaches before they are quite ripe, prick them with a large needle and rub off the down with a piece of flannel; put them into a preserving-pan with cold water enough to cover them, and let the water become gradually scalding hot. If the water does more than simmer very gently, or if the fire be fierce, the fruit will be likely to crack. When they are tender lift them carefully out and fold them in flannel, or a soft table-cloth, in several folds. Have ready a quart or more, as the peaches require, of the best white brandy, and dissolve ten ounces of powdered sugar in it. When the peaches are cold put them into a glass jar, and pour the brandy and sugar over them. Cover with leather and a bladder. Apricots and plums can be done in the same way.

ALINE.

Germantown, July, 1878.

POULTRY HOUSE.



THE WHITE LEGHORN.

For the Maryland Farmer.

So much has been said in praise of the White Leghorn fowl, that it almost seems like a repetition for me to say anything. Indeed, but little is needed to be said where they are known, as they recommend themselves to all who want an abundant supply of nicely flavored large white eggs.

There are few if any, that compare favorably with them in the production of eggs, and as they commence to lay at from, four to five months old, if hatched in March or April, you have not to be at the expense of wintering them. before they begin to "*settle their own bills*," as they have been known to lay (125 eggs the same summer they were hatched). Of course, then it is a great recommendation for them, where eggs are wanted in abundance, and the actual profit is our object without any regard to fancy points. And I have no hesitancy in saying, that where the Leghorn is once known it will always be kept for its abundance of eggs. As feeders, they are of course smaller eaters than any of the larger breeds, and as for-

ages they have no equal. And if you have large yards, or let them have the run of the farm, they will eat nothing or require no feeding the entire summer. Again they are a most attractive fowl, their pure white plumage, large red combs and wattles, yellow legs, and noble carriage, make them indeed a beautiful bird to behold on a green lawn. Of course they soil a little easier in a town or city which renders them a little objectionable in these localities, but this of course is more a matter of fancy than anything else. While they are too small to figure prominently as a table fowl in comparison with the larger Asiatic Dorking or Plymouth Rocks, yet they are by no means to be despised in this particular, as their white skin, white and tender flesh—particularly when young—renders them somewhat of a favorite, even in this respect. But it is, as egg producers, that the Leghorns excel, and as they are non-sitters, you always can depend on an abundant supply of nice fresh eggs, if you only take proper care of them. Another point which is of great importance to the breeder—Their eggs are unusually fertile, and the chicks when young quite hardy and easily reared, and as a rule, are less liable to disease than many other kinds,

JAMES M. LAMBING,
Parker's Landing, Pa.

Messrs. Editors MARYLAND FARMER.

Dear sirs:—The accompanying cut of White Leghorn Fowls was received from Mr. James M. Lambing, Parkers Landing, Pa.—I can add nothing to the letter received from Mr. Lambing, and think it advisable to publish it along with his cut. I will only add that our friend Lambing, when he says some pullets have laid (125) eggs same summer as hatched, reminds me of the old song—

Somebody stole my speckled hen,

I wish they'd let her be—

For every day she laid two eggs,

And Sunday she laid three.

Now Mr. Lambing says the pullet must be hatched in March and begin to lay at four to five months, and that time does not leave more than an average of 10 to 20 days for his (125) eggs the first summer, so we will be easy with him, and take it for granted that he means, during the first twelve months after hatching; I wouldn't be surprised if that old speckled hen was granamma of Geo. Colton's—celebrated Houdans.

W. S. TEMPLE.

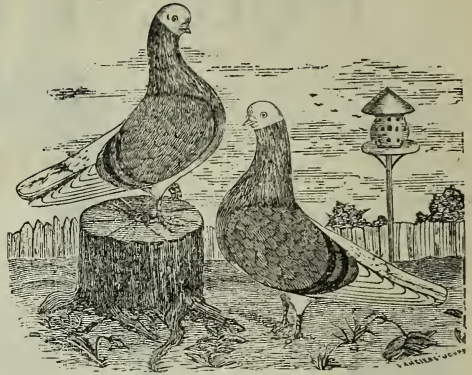
47 S. Howard Street.

HAMBURG FOWLS.

The head should be small and very neat; comb of the rose variety, square in front and firmly set up on the head, the sides not at all inclined to hang down over the eyes, but rising up in a nearly straight wall from the base; the peak or point, should run out well behind, and turn up slightly should not be round but flat, appearing from the side like a piece of a pocket-knife blade, any hollow in the center of the comb is very objectionable, and there should be plenty of coral like points all over the top. The wattles must be small, round and neat; ear lobes very white and round, and as smooth as kid; face bright red, and eye a dark brown. Red eyes are common, but not desirable. The neck should be very small at the throat, and of a very moderate length, widening gracefully toward the shoulders. Body round and plump, on moderately short legs of a lead color. The tail of the cock is moderate in size, with handsomely curved sickles, and with no tendency to carry towards the neck, nor to droop like that of a pheasant. The hen's tail should be neatly folded, and never carried open in fan-like shape. The beak is broad and flat. The whole carriage should be exceedingly graceful, and the plumage close, hard and brilliant. Any looseness of feathers is most objectionable.

There is an air of familiarity about a Hamburg, strongly characteristic, and no fowl is more easily kept tame. To my taste, the Golden (both sorts) Hamburgs portrayed in Wright's Illustrated Book of Poultry, represents the style of bird to be encouraged in all the colors of the variety.—Blacks are the hardiest, and lay the largest eggs. They are also good on the table, although small.—*Country Gentleman.*

PIGEON COLUMN



We are promised a monthly article on pigeons, by an intelligent young pigeon fancier, who is well qualified to enlighten such of our readers who are interested in breeding these pretty birds.

BY THE EDITOR OF PIGEON COLUMN.

The pigeon has heretofore been of very little use except as a pet, being too small as an article of food. But in the last few years the Antwerp or Carrier pigeon has been of great service in the transmission of messages from points distant, from telegraphic communications, and were of great service in the late French and German wars. They are the most hardy and vigorous of all breeds rearing five or six pairs of young each season. They can be kept in an old loft, if well ventilated and clean, with gravel or sand strewn on the floor. The nests should be placed around the sides of the loft a few feet above the floor. The best plan adopted in training them, as they require to be trained in short stages to return long distances with the greatest degree of certainty and rapidity. When the pigeons are two or three months old, counting from the time they leave the nest, and have during this time been flying around strongly. They are carried a distance from home of one mile and liberated. The second journey increase the distance three miles, then five, eight, twelve, fifteen, twenty, twenty five, thirty, forty, fifty five, seventy five, ninety and one hundred miles all in the same direction. If you desire to train them from another direction, you must pursue the same course of training. Allow one or two days rest between each flight, and be careful not to fly them in cloudy or rainy weather. Do not train the young birds the first season a greater distance than one hundred miles; the second year you can train them from one hundred miles to three hundred miles. The longest distance on record was flown from Rome to Belgium, 900 miles. The birds were started June 23rd 1878 at 5 A. M. at Rome, and the first bird arrived in Anderlect in Belgium on July 4th at 12.40 P. M.

THE LAST REPORT OF PIGEON CONTESTS.

Of twenty five carrier pigeons tossed from Scranton Pa. August 22nd at 8.20 A. M., the following arrived at time:

Named Six of Jno. Van Opstals birds at	11.22 $\frac{3}{4}$
Six of Donner's birds at	11.24
Two " "	11.40
Two " " about	12.00
Three Jno Mumpeton's	11.26 $\frac{1}{2}$
Five " " about	12.00

Creameries.

The advantage of creameries over ordinary dairies are so numerous, that it is difficult to select the most important of them to start with; but as the building has to be arranged previous to placing the milk in it, I will commence by describing its construction and equipment—First, a location should be selected if possible where a stream of cool water can be kept constantly running through the building, either supplied from a running spring which is best, or from a well worked by wind mill or other regular power—and secondly, the walls of the building should be of brick or stone, sufficiently thick to protect from change of temperature—the room should be paved closely with brick or smooth stone, or better still, should have hydraulic cement flooring, which is more easily washed off and kept clean—The ventilation of the room should be in the top or roof of the house, and not at the sides or near the bottom, by this means the impure and warmer air is carried off more easily, as it always ascends to the highest point in the room—I will add here that where it is practicable it is best to use ice and not water, for purpose of cooling the room—in this case it is not necessary to have any ventilation, as the ice placed in an elevated position, will attract all the moist air, which becomes condensed along with its impurities upon the surface of the ice, in order to accomplish this, it is necessary to place the ice in a close box,—water tight,—having several holes bored in it along the sides, about one third of its height from the bottom; and on each side of the box, attach a close casing, two to three inches from the sides of the box, and several inches higher than the ice box—the warm air will go up the flue formed by the casing, and the cold air from the ice box, rushing through the holes in the sides, will carry a constant current up over the ice, and bringing the impurities constantly up for condensation.

The next thing to consider, is the water trough for the milk settings—these can be made either of cement or of wood, and in either case, great care should be taken to keep them free from accumulation of impure matter.

There is great variety of opinion as to depth of setting the milk, and all of them have some plausible value—I am of opinion, that properly arranged and conducted, deep settings are best—upon scientific principles, which are satisfactory to everyone, who takes the trouble to investigate or put in practice. When the nature of the milk is well considered, and also the relative influences which effect its component parts, it will be easily seen why the deep settings if properly managed are most entitled to the palm of superiority. The water in milk is eighty-five-hundredths of its volume and this water, is the most rapid conductor of cold, of all its atoms—the cream, which is only a portion of the fifteen-one-hundredths parts

left, and being mostly oil, is the lightest and poorest conductor of cold—now it is desired to get the cream on top, and is anything more reasonable to suppose, than that if cold water is applied to the upper or highest atoms of the milk, that the water in the milk, getting cool quickest, will sink to the bottom and force the lighter ones of cream to the surface, and besides this, the higher the column of water, the greater is the pressure in an increased proportion, and so the deeper the settings the greater the pressure of water on the lower portions, to force up the lighter particles, both of cream and other atoms; the cream being lightest, beats in the race to the top, and stays there,

One system of setting, now in use, in many of the creameries, is the system known as the Cooly-system, which uses settings with covered tops, and the whole setting-vessel, submerged in the water, and in this way, the cold is applied immediately to the top of the milk, making the descent of the cooled particles of water, or poor milk, more rapid and complete; most of these settings, are not entirely air or water tight, but have a neck elevated above the vessel, and rising above the water—I think if dairymen will give the deep settings a fair trial, they will see the advantages which they possess—I do not mean that class of dairymen, who churn the full-milk for the reason, as they say, of making more butter, but in fact, they do not make as much, "butter," but still I grant them, that they make a larger mass of grease oil and caseine combined, which in the present age of improvement in butter making, *wont* pass as "legal tender"—"for pure butter," but has to be forwarded to the Redemption Bureau, better known as mills; there it is manipulated a little, and reissued, but it hangs about as heavily upon the hands of butter merchants, as the silver currency.

55 to 60 degrees is said to be the proper temperature for the creamery—but it may be found a little difficult to get this temperature in summer, and more likely, 70, will be found about as cool as some of the dairymen can get down to, and if 70 can be reached, don't get angry with it, as a great many 60 degree dairymen, keep their rooms dark in summer, so they can't see when the mercury travels up ten degrees—most dairymen say, churn at 60 degrees, but I advise you to churn at 60, in winter, and be satisfied with 70, in summer, but try hard for seventy, and you may, or may not get to it. After churning, press out the milk with a paddle, gently, and work in the salt, partially—using only Ashton salt, the salt attracts the particles of moisture, and after letting the butter set for a few hours, it will be found that the butter milk in many places, will have collected in cells, about particles of the salt, after letting the butter remain not long enough for it to get hard, but a little firmer than when in the churn, wash it well with clean fresh water, and the butter-milk will then be easily washed out—after which, the butter should be packed, or if desired printed, before becoming solid, as it never packs or prints so firmly, or smoothly after it has once hardened—I will close by presenting to dairymen, the chief advantage of creameries, and, "that is, the use of them upon co-operative system, by neighboring dairymen, who form themselves into a company, select a desirable location, and build their creamery

with more improved equipments, possibly than would be profitable to any individual dairyman—employ a good practical man, for operating the creamery, and a president for selling and managing the affairs of the company. To these creameries, each stockholder takes his milk daily, has it weighed and gets his receipt, and is credited with his weight, and receives his proportionate part of receipts, from the sales of the butter; and in most creameries the members of the company, also take back home their proportion of the skimmed milk, for their hogs, and used in this way, the milk is said by some to be equal—100 lbs of it, to one and-half bushels of corn—These creameries are operated with great success, in the North and West, and it is to be hoped, that they may also find favor in your section, for improvement of the dairy interest.

W. S. TEMPLE,
47 S. Howard St.

For the Maryland Farmer.

Biographical Sketch of Jane Porter.

BY D. Z. EVANS, JR.

There are many of our readers to whom the name of Jane Porter will be new, but her writings have a host of admirers, for those who admire true, noble sentiment and delight in reading the talent evinced in all of Jane Porter's compositions.

Jane Porter was English, being born in Durham England in 1776, and died at the age of 74 in Bristol, England. She was never married, but devoted her life to the enlightenment and improvement of the public by writing works which reveal a depth of feeling surpassed by none others. Most of our older readers, and many of our younger ones, have heard of "Thaddeus of Warsaw," Miss Porter's first work of importance. This book took well and commanded large sales, while it still is found in the libraries of many of our lovers of good reading. The publication of "Thaddeus of Warsaw" established the writer's reputation, for it was eagerly read by many different nations, being translated into several languages. It also secured her an appointment as lady Canoness of St. Joachim. This work was soon followed by others, in 1809 being published her "Scottish Chiefs," which is, no doubt, her last production. It described the adventures of Bruce and Wallace, the heroes of Scotland, and depicts, in befitting language, the characters and feelings of these Chieftains. It opens with an account of how Wallace was suspected of espousing the cause of Scotland, and was hunted down. A party of soldiers came to his residence, and demanded his presence. Wallace had become apprised of the approach and designs of the soldiers, and secreted himself in a well. After a vain search for Wallace, the captain of the soldiery demanded of lady Wallace where her husband was concealed. She persistently re-

fused to betray his hiding place, which so exasperated the Captain, he ran her through the heart with his sword, and left her lifeless body laying in the room, where her husband found it after the soldiers had gone.

We would advise our readers to read this work, for it is full of interest, pathos and high moral character. Wallace took the field against England's hosts, and had many trials and temptations, but came out of them all with a name untarnished by a breath of suspicion. Even to this day the Scots revere the names of Wallace and Bruce.

There are several other highly meritorious works written by this gifted authoress, principally amongst which are "Duke Christian of Luneburg" and "The Pastor's Fireside," 'tho these are not so well known and so largely read as her "Scottish Chiefs." In 1831 appeared her "Sir Edward Seaward's Library," which is a very highly esteemed work of fiction. The peculiar realistic style of its arrangement and composition has led many to suppose it to be historical. Some of the reviewers of that time accepted it as a history, and any one reading it even now can scarcely divest their minds of the idea that it is purely imagination, as it undoubtedly is.

A few years after the writing of the above, Miss Porter took up her residence with her brother, Sir Robert Ker Porter, in St. Petersburg, Russia, where they both remained until the death of her brother, when she returned to Bristol.

If we can judge of Miss Porter's character and feelings from her writings, we must accord to her nature a depth of feeling, a grandeur of sentiment and an ennoblement of virtue that many of our best writers have not possessed. Nowhere in historical romance can we find a grander character so well portrayed as in Wallace, in Miss Porter's "Scottish Chiefs," she seemed to possess the happy faculty of developing, with a ready pen, the best and most noble and sincere parts of a noble man character, and investing it with a grandeur which cannot help but command the admiration of all who read her productions. She was not a voluminous writer, but all her works bear evidence of culture and refinement; of a richly stored mind and of careful preparation in the composition. She evidently wrote carefully and so arranged her sentences and thoughts that they are justly esteemed as highly finished compositions.

Anna Maria Porter, a younger sister of the above was also a gifted writer, tho' her productions have not gained the same celebrity as have those written by the author of the "Scottish Chiefs." She wrote one or more works in connection with her sister, but as they are not so well known as those I have above named, I will not mention them here.

Jane Porter confined herself to prose works, and in her particular style has but few equals and no superiors.

LADIES DEPARTMENT.

Chat with the Ladies for September.

BY PATUXENT PLANTER.

"There were no roses till the first child died,
No violets, nor balmy-breathed hearts-ease,
No heliotrope, nor buds so dear to bees,
The honey-hearted suckle, nor, gold-eyed
And lowly dandelions, nor, stretching wide,
Clover and cowslip-cups, like rival seas,
Meeting and parting, as the young spring breeze
Runs giddy races playing seek and hide.
For all flowers died when Eve left Paradise,
And all the world was flowerless awhile,
Until a little child was laid in earth ;
Then from its grave grew violets for its eyes,
And from its lips rose-petals for its smile,
And so all flowers from that child's death took
birth."

I have but little to chat about this month, beyond a simple reminder that this is a busy time with house-keepers, in preserving, canning and drying fruits ; pickling and butter making.

This month arrangements for a show of winter flowers in the house and conservatory are to be made, such as rooting cuttings of various plants, which were not done last month. It is rather late but not too late.

I will call your attention to a beautiful extract I make from that inimitable magazine, published by the floral king—Vick of Rochester N. Y.

How Flowers Help us all.

The Nurserymen, Florists and Seedsmen held a National Convention in Rochester, in June last, and at that time we had the pleasure of meeting those who are engaged in the pleasant work of providing the people with fruits and flowers, from the far East and the growing West ; indeed from all sections of our country. We were invited to address the assembly, but thought our time would be better spent in providing for the pleasure of our guests. More than that, it seemed more polite, and certainly more in accordance with our feelings, to listen to our friends, rather than to talk to them. Among the addresses to which we listened was one from HUGH. T. BROOKS, *How Flowers Help us All*. MR. BROOKS is always interesting, and we quote a few choice paragraphs:

"SCROGGS thinks the serpent, after making mischief with the fruit, turned to flowers, as his next 'best holt,' and has used them ever since to tempt our wives, sisters and daughters into useless waste of time and money. Mild mannered men think they

are well enough in their way ; more ornamental than useful ; cost more than they come to ; not as good as bank stock to get to heaven with. That would be the decision to-morrow, with bulldozing, bribery, or false returns. Allow the women to vote, disfranchising, perhaps, the 'strong-minded,' and the result might be different. Obviously, able-bodied Yankees care little, and know less, about flowers. How do we account for this ?

Our puritanic education turned our thoughts in other directions ; the pressing necessities of a new country, the mad rush after riches, all conspire to throw floral embellishments into the background—out of it, rather.

Never till we fathom the deep mysteries of spiritual and material growth, can we understand the full significance of flowers—the mission of bloom ! Swine need only gross food. Offspring of Divinity, illumined by a ray of infinite intelligence, we require etherial nourishment. Why all this brilliancy and variety of color, the sweet harmonies of sound, if they are not to challenge our admiration, engage our thoughts, and minister to our necessities ? We are spiritually fed by the grand, the beautiful, and the good in nature. Our souls are enlarged, strengthened and purified by ocean's vast expanse, the serene depths of the blue sky, the shifting drapery of the clouds, the matchless grace and beauty of the floral kingdom. Certainly the bread that nourishes our grosser parts is not more important than that which ministers to our higher faculties. The appetites, lower instincts and passions will control the man, unless his moral sentiments and intellectual perceptions are cultivated by the devout contemplation of God's wonderful works. The mission of flowers, like the angels, is pure. Beauty and grace have a refining and regenerating influence to help forward the great reformation.

Push forward the tree planting—make this loved land of ours one vast landscape garden. You have reason to be encouraged. Your public exhibitions and your private collections educate and stimulate the people.

Landscape adornments may be overdone. You cannot put into a rod what was meant for a rood. The Duke of Athol, with his four hundred thousand acres, may indulge in varieties. You must not put into your sixty feet by eighty, trees, shrubs, flowering plants, vases, fountains, and a menagerie of wild animals. Quality is better than variety. You may grow a shrub, the pride and admiration of your neighborhood ; you may have forty of the same genus that nobody cares to look at.

One thing I must not omit to say. For general cultivation, recommend hardy varieties. Hardy herbaceous flowering plants are very desirable, as being in a measure able to take care of themselves—that, I am sorry to say, they are often compelled to do. A *succession* may be secured. Roses cannot be extolled too highly ; they are everywhere and always beautiful, and our florists deserve profound thanks for the improvements made in their form and color ; particularly Hardy Perpetuals.

For myself, I stand firm by the plants of my boyhood. I never see a Pink, a Poppy or a Sweet William without thinking of my mother, and I thank God she is associated with such pleasant memories."

General Meems' Great Sale.

We attended the great sheep sale of Genl. Meems, at his farm, near Mt. Jackson, Virginia, on the 28th of August. Our ride was over a magnificent country, and the pleasure of the trip was much enhanced by the conversation of our genial friend S., whose poetic imagination revelled in the splendid scenery. We enjoyed to the full, that warm hospitality of which "old Virginia never tires,"—dispensed on this occasion so cordially by Genl. Meems and his charming lady. The sale was very largely attended, notwithstanding the unfavorable appearance of the morning. There were offered nearly 200 Cotswold ewes and bucks, and 20 Southdown bucks. The entire lot were superior to any like number in one flock we ever saw. There was not an indifferent one in the whole lot, and where all were so alike each other, there was but little choice between them. They were nearly all of the same age and size, all were in good condition but not over fat. Many were remarkable for the length and fineness of wool and compactness of the fleece. The Southdown bucks, were very superior.

The bidding was at first a little slow. The bidders seemed perplexed in their own minds which individual animal to lay out his pile upon, and thus hesitated to bid for the one being sold, lest one might soon be put which he would prefer. But all the buyers soon warmed up under the rapid action of the auctioneer who seems to have a magnetic power to keep all who wish to buy, in good business trim and attend to what is going on, thus no time is lost. Among the youngest sheep were two buck yearlings or rather lambs, for they were not a year old, from the flock of Mr. Wm. Miller, of Canada, which at once arrested our attention, and our admiration of the immense fleeces they had, although they had been clipped last February; the wool was soft as silk and very long, and crimped as the curls on beauty's head. They were both by the famous buck—*North Leads Champion*—for whom Mr. Miller paid 200 guineas—\$1000—in England. One of them was out a Lane ewe. There were two hundred and three sheep—ewes, bucks, and lambs, and aggregated \$4500, or an average per head of \$22 and 16½ cents. A good sale for the first attempt of the sort in the South. The sale was admirably conducted by that accomplished auctioneer and gentleman, Col. L. G. Muir, of Paris, Ky., who makes the annual sales of Capt. Hill, J. W. Allison, Hon. T. J. Megibben, the Bedfords and Clays, of Ky.; Col. Holloway, Abner Strawn and others of Ill.; Judge W. B.

Fairfield, and others of Iowa; besides numerous sales in all parts of the Union—as well as the annual sales of Hon. M. H. Cochran, of Canada.

Universal satisfaction and pleasure was expressed by all who was present. Among the more distinguished guests present were Gov. Holliday, Dr. Pollard, Commissioner of Agriculture, of Va. and Dr. Dickinson, Editor of the Southern Planter and Farmer, of Richmond. There were a great many Marylanders in attendance. Being much pressed for time and want of space we have barely given an outline of this memorable "new departure" in stock sales in the old Dominion, and must reserve what we have to say in connexion with it for a future number of our journal; having taken copious notes, we will give the benefit of them to our readers then.

Maryland State and County Fairs.

State Fair at Pimlico, September 24 to 27.
28th Ex. Maryland Institute Oct. 2 to Nov. 6.
Montgomery county, Rockville, Sept. 11 to 13.
Talbot county, Hambleton Park, Sept. 11 to 13.
Washington county, Hagerstown, Oct. 16 to 18.
Western Maryland, Cumberland Oct. 22 to 25.
Kent county Chestertown, Sept. 17 to 19.
Frederick county, Frederick city, Oct. 8th—11th.
Harford, Bel Air, Oct. 8 to 11.

FAIRS IN VIRGINIA.


Piedmont, at Culpeper, Oct. 15 to 18.
Shenandoah Valley, Winchester Oct. 15 to 18.
State Fair Richmond, Oct. 26 to Nov. 1.
Loudon county, Leesburg, Sept. 17 to 19.

DELAWARE.

State Fair at Dover, Sept. 23 to 28.

NORTH CAROLINA.

Roanoke and Tar River Agricultural Society,
Weldon, Oct. 28 to Nov. 1.

 We beg leave to call the especial attention of the patrons of the Maryland Farmer to the advertisement of the Mr. John Q. A. Holloway, on the opposite page. Mr. Holloway as is well known has been of the firm of J. J. Turner & Co. for many years but recently withdrew, and purchased the works of the old firm on McElderry's Wharf, where he is manufacturing largely the Excelsior Peruvian Guano, which he has reduced to \$46 per ton. The price and the fact that it has been extensively used for the past 20 years should recommend it to the favorable consideration of our farmers.

SITUATION WANTED—A young man desires a situation on a farm, is acquainted with all kinds of farm-work. Address J. H. W., Maryland Farmer.